

ZYGOURIES

A PREHISTORIC SETTLEMENT
IN THE VALLEY OF CLEONAE



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BY

CARL W. BLEGEN, PH.D.



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TO
THE MEMORY OF
RICHARD BERRY SEAGER

PREFACE

THE excavations at Zygouries, the results of which form the subject of the present monograph, were conducted by the American School of Classical Studies in two campaigns, in the spring of 1921 and in the late summer of 1922.

Grateful acknowledgments are due to the late Richard B. Seager (who at one time hoped himself to participate in the digging), to Dr. and Mrs. Edward Robinson, of New York, and to Mr. C. B. Spitzer, of Toledo, who by generous gifts provided the greater part of the funds necessary to carry out the undertaking. Contributions were also received from Edward Capps, Jr., and from Alexander Capps.

The Greek archaeological authorities with their unfailing courtesy granted the permit for the excavations, and their representative, Dr. Ch. Karouzos, was present for a considerable time during the work of both seasons. We are further especially indebted to them for putting at our disposal the spacious *metochi*, or farmhouse, belonging to the Monastery of St. Demetrius, which proved a most comfortable place of abode and provided also a large workroom for the cleaning and sorting of the pottery.

The excavations were throughout in my charge. In the spring campaign of 1921, from April 13 to May 21 I enjoyed the invaluable collaboration of Mr. A. J. B. Wace, Director of the British School at Athens, for whose ever ready help and advice I am under profound obligation. Indeed, the extent to which I drew on Mr. Wace's generous assistance led me to hope that the report of the excavations might be issued as a joint work.

The members of the School who assisted in the first campaign were Dr. J. P. Harland and Dr. J. Donald Young. Dr. Harland was present from the beginning to the end of the season in constant charge of certain trenches, chiefly in the central part of the hill, and also superintended the exploration of House L. Dr. Young arrived on May 9 and undertook the investigation of the southern quarter of the settlement. It is a great pleasure to thank these two gentlemen for their help, and for the willingness and conscientiousness with which they carried out the tasks that fell to them.

Dr. L. B. Holland, Architect of the School, arrived on May 11, and there could be no better testimony to his patience and painstaking accuracy than his plans, which accompany this report. His contributions in discussions of architectural problems and in the interpretation of puzzling remains cannot be overstated.

Others who rendered assistance for shorter periods were Dr. C. A. Boethius, of Upsala, who superintended, and indeed undertook with his own hands, the removal of most of the cooking pots from the "Potter's Shop," and Miss Wildes, Miss Lamb, and Miss Herford, who all helped extract the cylixes from the same building.

The campaign of 1922 began on August 22 and continued until September 27. During the greater part of this period Mr. W. A. Heurtley, Assistant Director of the British School,

was present and gave extremely valuable aid in every way; measured drawings of all the tombs were made by him, and he also provided the additions to the general plan necessitated by further digging on the hill itself.

George Alexopoulos, of Mycenae, acted as foreman during both campaigns, and his capable, efficient service contributed in no small degree to make operations run smoothly and with dispatch.

In the preparation of the manuscript for publication I owe much to the generous assistance of Mrs. Blegen and of Miss Anne Blegen. It is a pleasure likewise to acknowledge my great indebtedness to Professors P. V. C. Baur, G. H. Chase, and H. N. Fowler, of the School's Publication Committee, who have given highly valued advice and help. Professor Chase, in particular, has offered unsparingly of his time and thought in contributing to solve the problems which have arisen. I am also glad to have an opportunity to record my obligation to Professor James M. Paton for his kind offices in connection with the printing of the colored plates in Paris; and to the readers and the staff of the Harvard University Press for their painstaking care and coöperation, to which the appearance of the volume is due.

If the Director of the School has been left until the last in this list of those to whom cordial thanks are due, it is only because Mr. Hill's support and counsel have been constantly asked from the inception of the project for the excavation until the completion of this report and have been unfailingly and generously given, together with encouragement and stimulation to the very end.

In the campaign of 1921 the whole hill was investigated by means of numerous trial trenches, a considerable section of an Early Helladic settlement was laid bare in the central area, and one house of the same period was uncovered in both the north and the south quarters of the mound. On the steep eastern slope part of a large Mycenaean building, the "Potter's Shop," was cleared, and exploration extended down into the flat ground below the hill and up the bed of the stream to the southward.

The campaign of 1922 was devoted chiefly to the quest for and the subsequent exploration of the cemetery, which was finally discovered occupying a long, sloping hillside half a mile west of the settlement itself. At the same time supplementary digging at Zygouries clarified not a few problems, yielded the complete plan of an additional Early Helladic house, and permitted the complete excavation of the "Potter's Shop."

The work of these two seasons at Zygouries, though conducted on a small scale, yielded much new material for the study of the prehistoric age in Southern Greece. In the field of architecture the most considerable remains of Early Helladic houses yet known were recovered, giving definite evidence for the plans of dwellings then in use. In the cemetery three Early Helladic tombs of a type not hitherto represented were discovered, throwing new light on the burial customs of the Early Bronze Age. Pottery was found in abundance, and the gratifyingly high number of whole or almost complete vases from this small site forms a noteworthy and useful series. Among the objects of gold, bronze, terracotta, bone, and stone are not a few of unique interest.

All the movable finds were transported to Old Corinth and have been deposited in the Corinth museum. The Greek government has generously presented to the Metropolitan Museum a selection of duplicate vases from the excavations.

The results of the excavations will be discussed in the following chapters, after a brief description of the site itself, under the headings Architecture, Tombs, Pottery, and Miscellaneous Objects. A preliminary account of the results obtained was written after each campaign and published in *Art and Archaeology*, vol. XIII, 1922, pp. 209-216, and vol. XV, 1923, pp. 85-89. Needless to say, these two brief articles, and any other notices that may have appeared, are superseded by the present report.

Of the illustrations accompanying this volume, the detailed drawings reproduced in Plates I and II were made by Dr. L. B. Holland; the plans of the separate houses and of the tombs, presented in Figures 5, 7, 9, 14, 17, 18, 21-23, 25, 38, 41, 43-46, 48, 51, 58, 62-64, were prepared by Miss D. H. Cox, from the drawings of Dr. Holland and Mr. Heurtley. The water-colors and the sketches for Plates III-XXII and for Figures 12, 69, 71, 81, 87-89, 91, 92, 94, 99, 100, 109, 113-131, 135-139, 160, 171, 172, 181, 182, 184-187, 189-191, 194-198, are the work of Mr. Piet de Jong. The water-color from which Figure 134 is taken was made by Mr. William V. Cash. The sketches for Figures 176, 180, 199 were provided by Mr. E. Gilliéron; that for Figure 178 by Mr. J. H. Breiel. The photographs for Figures 34 and 35 I owe to Dr. J. P. Harland; that for Figure 3 to Dr. J. D. Young; that for Figure 183 to Dr. B. D. Meritt. The illustrations of the pottery and of the miscellaneous objects are mainly from photographs taken by A. Petritsis, of the staff of the National Museum in Athens, whose services were kindly placed at my disposal through the courtesy of Dr. Kastriotis, Director of the Museum. The reproductions in color, Plates III-XXII, were made by Daniel Jacomet & Cie., of Paris.

CARL W. BLEGEN

ATHENS, *March 5*, 1926

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ZYGOURIES

A PREHISTORIC SETTLEMENT IN THE
VALLEY OF CLEONAE

CHAPTER I

THE SITE

MIDWAY between Corinth and Mycenae, shut in by a mountain range on either side, lies the pleasant upland valley of Cleonae. A high, rounded elevation, rising steeply at its western end, bears the ruins of the acropolis of the Cleonaeans, the excavation of which was undertaken in 1912 by the German Archaeological Institute. Some distance below the acropolis on the east passes an old Turkish road which must follow the line of one of the important ancient routes connecting Corinth with the Argolid. From the Corinthian plain this road ascends the narrow defile of the Longopotamos, cuts through the western part of the Cleonae valley, and crosses over the ridge toward Mycenae and Argos by the pass which leads through the green wood and gardens surround-



FIGURE 1. GENERAL VIEW OF THE SITE FROM THE NORTH

ing the modern chapel of Hagios Sostis near the railway station of Nemea. There can hardly be a doubt that this was one of the main highways of traffic in classical as well as prehistoric times.

Across the valley to the southeast, in a subsidiary plain below the village of Hagios Vasilios, some two miles from Cleonae and perhaps one and one-half from the presumable course of the ancient road, stands a low hill (Fig. 1) on which grow a few stunted wild pear trees, and here and there, in spots marking an old stone heap, clusters of a peculiar shrub called by the local farmers "zygouries."¹ From these shrubs, which are its

¹ Zygouria = *anagyris foetida*, familiar along the north shore of the Mediterranean, and occurring in Greece from Thessaly to Crete. In Crete it is also known as "azogyron," so Dr. Hadzidakis tells me; and perhaps Azoria Hill, excavated by Mrs. Harriet Boyd Hawes in Eastern Crete, owes its name to a dialectal form of the name of the same shrub.

most conspicuous feature, the hill itself has come to be known by the same name, Zygouries.

The situation of Zygouries is a very striking one: close at hand on the south rise the towering cliffs of Mt. Tretus in three well-defined masses now called "*Δαφνιάς*," "*Κούτουλία*," and "*τῆς Παναγίας ὁ βράχος*," surmounted by broad plateaus which are much frequented by shepherds with their flocks; to the north a rich agricultural region slopes gently away in a series of undulations draining into the Longopotamos. Far to the west appears the long ridge culminating in flat-topped Phoukas, beyond which may be seen in the remoter distance the mountains of the Arcadian highlands; and on the east a succession of partly wooded hills stretches away to the upland of Tenea.

A second highway must have traversed this valley from east to west in ancient times, following approximately the line now taken by the railway and the modern carriage road.



FIGURE 2. GENERAL VIEW OF THE SITE FROM THE WEST

This route, no doubt the direct road from the Isthmus, coming up through the gap between Mt. Oneion and Acrocorinth, reached the broad watershed at Chiliomodi, then dropped down rapidly to the plain below Hagios Vasilios, and continued westward, climbing again to the saddle at Nemea station in order to descend finally through the Dervenaki Pass to the Argive plain. At some point not far to the northwest of Zygouries this route must have intersected that coming up the Longopotamos from the north. The hill of Zygouries thus offered a highly favorable position for a prehistoric village, lying in a somewhat secluded tributary valley of its own, in control of a fertile agricultural district, and not far from an important cross road of traffic.

The hill of Zygouries (Fig. 2), somewhat irregular in shape, measures about 165 m. from north to south and has a width of *ca.* 70 m. at its widest point. It is a natural ridge of conglomerate or gravelly limestone on which lies a deposit of earth and *débris*, the product of gradual accumulation as a result of successive prehistoric settlements.

At the summit of the hill the deposit is very thin; in some places the crumbly rock is not more than 0.30 m. below the surface of the ground. Toward the eastern and western

slopes, however, the accumulation is much thicker, attaining a maximum depth of *ca.* 3 m. Apparently the top of the hill was at some time — probably more than once — cut down or leveled off, being thus for the most part swept clear of its prehistoric deposit. This operation was certainly carried out in mediaeval times, as was clearly shown by the Byzantine walls and the Byzantine pottery discovered in immediate juxtaposition with Early Helladic remains in Trenches IV and VI; but a similar operation had in all probability already been effected in the Late Helladic Period.

Apart from the Byzantine pottery and the walls mentioned above, all the remains found at Zygouries belong to the prehistoric age; nothing of later date came to light. There are no modern buildings on the hill. The whole surface was under cultivation, being planted at the time of the excavations chiefly with vetch and beans. The mound is not, however, very favorable to agriculture, since the numerous stones and stone walls covering it make ploughing difficult.

The prehistoric deposit allows itself to be divided clearly into three main layers, though the traces of the middle one in the chronological sequence are much more scanty than those of the other two. These layers are the Early, Middle, and Late Helladic and correspond closely with the stratification observed at Korakou and at other sites. At Zygouries, however, these layers do not all extend continuously over the whole hill, one overlying the other in regular order; as a result of the cutting down and leveling mentioned above, the stratigraphic sequence has been disturbed. In consequence we find that the prehistoric deposit on the central part of the hill is almost purely Early Helladic with only a few remnants of the Middle Helladic layer, which may be seen in the Minyan and Mattpainted sherds from Trenches V and VI, and in the Middle Helladic graves; while the Late Helladic Period is here almost entirely unrepresented. Near the eastern edge of the hill, on the other hand, the Late Helladic Period is well represented in at least two of its phases, while below it lie Early Helladic remains to a considerable depth. Farther down the slope again the Late Helladic layer is thick and comparatively well preserved with a clear Middle Helladic stratum resting on native rock below it. The cemetery, finally, appears to have been in use throughout the whole Bronze Age, as graves of all three periods, Early, Middle, and Late Helladic, were included in it.

CHAPTER II

ARCHITECTURE

I. EARLY HELLADIC PERIOD

ALMOST everywhere in the central part of the hill where digging was undertaken a maze of walls belonging to the Early Helladic Period came to light (PLATES I and II). These walls lie very close to the present surface of the ground and have suffered no little damage from the plough and from other causes, rendering it difficult to identify clearly their connections and to recognize with certainty the original complete plan of the buildings to which they once belonged.

The walls are generally from 0.60 m. to 0.90 m. in thickness, built of unworked stones of good size, laid in clay. In some cases the lower part of the construction is considerably



FIGURE 3. EARLY HELLADIC STREET FROM THE SOUTH

thicker than the upper, which gradually diminishes in steplike courses. Some of these walls are *ca.* 1.50 m. high, but only some 0.50 m. of this projected originally above ground, the remainder having constituted a solid foundation. The superstructure of the house above the stone base was of course built of crude bricks; many more or less complete specimens of such bricks were found.

Though the complete plans of the separate houses remain in many respects somewhat uncertain, it is evident that the establishment or village as a whole consisted of numerous small dwellings set close together and separated by narrow crooked streets or alleys. One

such street (No. 27 on the plan, PLATE II; Fig. 3) was traced for more than ten metres, running north and south. It averages only 1.25 m. in width and is bounded by walls of houses on either side. It is made of a thick layer of small pebbles and potsherds, very well packed and trodden, and apparently also received much rubbish thrown out from the adjoining houses, such as animal bones (usually split so that the marrow could be extracted), mussel shells, snail shells, fragments of small objects of bronze, broken pottery, etc.



FIGURE 4. NARROW LANE FROM THE EAST

Branching off from this narrow street is a still narrower alley, running westward for a distance of *ca.* 8.00 m. (No. 18 on the plan, PLATE II; Fig. 4). Its width is hardly more than 0.90 m., and it was probably merely the approach to a single house. It is constructed of exactly the same sort of material as the street already described. The alley seems to have ended when it reached the door of the house. The street, on the other hand, went on farther to the north, but its continuation could not be traced to any great distance, since it extended into an area which has suffered much disturbance from later building.

No extensive architectural remains of the Early Helladic Period have hitherto been published, previous discoveries in this field having been very scanty indeed, and the ten separate houses which could, with some uncertainties, be distinguished at Zygouries seem, therefore, to merit more than passing attention. Before entering upon the detailed description, however, which will be given here to make the record complete, a brief summary may be offered of the general conclusions which these remains appear to warrant.

The dwelling houses at Zygouries are for the most part small and apparently of no standardized shape, though all are rectangular in design and regularly composed of two or more rooms. What seems to be a constant feature in almost all is a tendency to make the chief inner chamber roughly square in plan; indeed, this inner square room, sometimes small, sometimes relatively large, may be taken as one of the characteristic marks of these Early Helladic houses. In some cases there certainly was a fixed hearth in the centre of the room; in others no trace of any such arrangement could be recognized. The outside door in three cases, where satisfactory evidence of its position was preserved, led into the smaller of the two rooms forming the house, and in all three instances was placed on the long side of the building. The roof was undoubtedly flat; no trace of columns was found, and no column bases came to light, but it is possible that wooden supports were used where necessary. No rule of orientation was observed; since the houses appear to have stood in groups or blocks formed by intersecting streets and lanes, these latter must have been the determining factor in the orientation of the buildings. There was some slight evidence for the use of party walls; but perhaps the two houses thus connected were not entirely independent dwellings. In a few instances it looks as if the house faced an open court, which may have been surrounded by a wall.

It is safe to say that none of these Early Helladic houses at Zygouries is of the so-called "megaron type"; that is, the main element of the plan is in no case a long room with a central hearth and with an entrance through a portico at one end. These houses are of a quite different character and may perhaps be more closely related to the types represented in the Cycladic settlements, like Phylakopi, or in the small towns in Crete, such as Pseira and Gournia (though these latter are naturally much later in date).

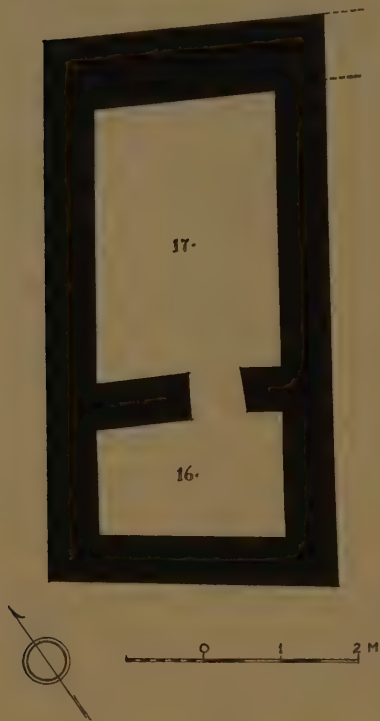


FIGURE 5. PLAN OF HOUSE D

It must be considered a noteworthy fact that no trace of apsidal construction came to light in the Early Helladic layer at Zygouries. All the walls uncovered are straight or were obviously meant to be straight, and the corners are in all cases rectangular or closely approach a right angle. And yet it cannot be doubted that curved construction was known and practiced in contemporary settlements not a great distance away. An apsidal type of house, acutely restored by Bulle, is represented at Orchomenos (*Orchomenos*, p. 35), and a remarkable further achievement of Early Helladic architects is illustrated in the monumental circular foundation discovered beneath the Mycenaean palace at Tiryns (Karo, *Führer durch die Ruinen von Tiryns*, pp. 7 f.). It must be admitted, however, that the remains at Orchomenos were sadly scanty at best, and in view of the abundant evidence of rectangular construction now available from Zygouries, it cannot be maintained that the apsidal type of house was the prevailing type everywhere in the Early Helladic Period.

1. House D (Nos. 16 and 17 on the plan, PLATE II; Fig. 5).

Standing on the northwest side of the corner formed by the street and the alley which have already been mentioned, is a small building of which the plan seems to be clear and approximately complete. The walls of this house are firmly built of small stones, and measure 0.60 m. to 0.65 m. in thickness. They are well preserved on the east, south, and west sides, but the north end is covered over by a later wall, presumably Mycenaean in date. The house is long and narrow, measuring 5.65 m. from north to south (inside dimensions)



FIGURE 6. HOUSE D FROM THE SOUTH

by 2.50 m. from east to west. This length is not the original full dimension, since the later wall crossing the north end of the building has shortened the room somewhat; but it is probable that this chamber was originally not much more than 0.50 m. longer.

The house is divided into two rooms, a small chamber 1.40 m. by 2.50 m. at the south (No. 16), and a larger room 3.65 m. by 2.50 m. at the north (No. 17). A doorway between the two rooms is clearly marked near the eastern end of the partition wall; it is very narrow, having a width of only 0.65 m. The outside door seems to have opened through the eastern wall of the small south chamber upon the street passing along the side of the house. Just inside the wall here, on the north side of the presumable door-opening, lies a stone in which a circular hole has been cut or worn. Though not very well cut, this hole was unmistakably intended for a pivot; it is 0.04 m. deep and has a diameter of 0.11 m. at the top, which diminishes to 0.04 m. at the bottom. At the point where the stone was found it would serve well enough for a simple door, opening from the street. The level of the street is somewhat higher than that of the floor within, and a person entering would need to watch his step. Two stones set on edge in the wall, 1.00 m. apart, suggest the width of the door-opening.

The small south room thus appears to be simply an anteroom, while the larger chamber to the north was evidently the main living room of the house, and we have here, therefore, a good example of the so-called "but and ben" type of construction, or of what may perhaps better be described as a primitive two-room dwelling.

A considerable amount of pottery was found on the earthen floor of the north room, including one complete sauceboat and a high cylindrical stand, perhaps the support of a broad, shallow basin (Fig. 108). Against the original north wall probably stood a row of pithoi like those in the House of the Pithoi (p. 11). One of these is still in place and may be seen in the illustration (Fig. 6) at the northwest corner beneath the Mycenaean wall which runs directly over it. The presence of this pithos is the evidence suggesting that the original end of the room was only a short distance farther north.

House D lies directly adjoining the House of the Pithoi, but the boundary between the two is not formed by a party wall; each house has its own wall of full width.

2. House A (Nos. 6 and 7 on the plan, PLATE II; Fig. 7).

This building lies some distance north of the house just described, too near the edge of the hill to have escaped damage at the hands of the builders of the Mycenaean period. One room of the house is, however, still well preserved, and enough of the remainder exists to allow a practically certain reconstruction of the plan.

The preserved room (6 on the plan) is a square chamber, measuring *ca.* 2.70 m. on a side, with solidly built foundation walls. These walls originally continued southward beyond room 6, and it is here that the second chamber may be recognized. Though the upper part of the east wall has been demolished, its substructure still remains *in situ* and at a point 1.65 m. south of the partition wall reaches a corner from which a foundation in wretched

condition may be followed westward. This undoubtedly marks the original south end of the house, and in this direction there are traces of a southwest corner in line with the existing west wall of room 6.

We thus have here again a small two-roomed house similar to that described above. In this case, too, the entrance from outside leads into the smaller room. It is clearly marked in the east wall of the latter, where there is an opening *ca.* 0.62 m. wide. Just inside it is a large flat slab of limestone which evidently served as a threshold (Fig. 8).

This house lies directly in the line of the street coming from the south, and thus made necessary a sharp turn in the roadway. The street could hardly have swung to the west, since the north wall of House D presumably blocked it in this direction. To the east, however, there is no obstacle, and the road was most probably carried on here past the southeast corner of House A. At this point it probably turned northward again, and the door of

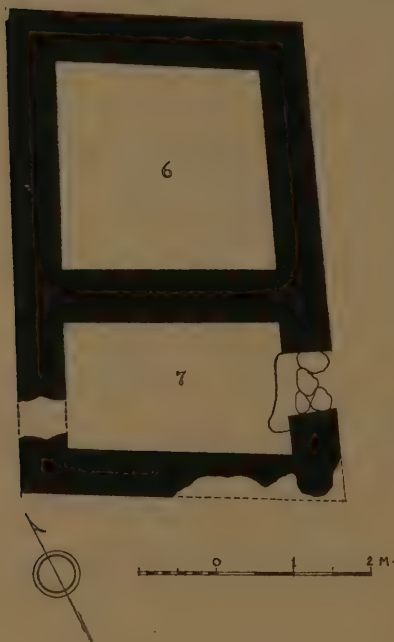


FIGURE 7. PLAN OF HOUSE A

the house would thus have opened directly from the street, as was the case in House D.

A fragment of a pivot stone was found lying on the partition wall between the two rooms, apparently not in its original position. The clay floor was not especially well marked, and no trace of a fixed hearth was observed. The objects found in the house were few, including, apart from broken pottery, only a small vase in the form of a bird, two whorls and a conical object, perhaps a primitive idol, of terracotta, and a piece of flat bronze wire.



FIGURE 8. HOUSE A FROM THE SOUTH

3. The "House of the Pithoi" (Nos. 3, 4, and 5 on the plan, PLATE II; Fig. 9).

The largest and most pretentious building uncovered on the hill of Zygouries lies immediately to the west of House D, not far from the central part of the mound. It is not approached from the street, nor from the alley mentioned above; perhaps another street ran along the crest of the hill, on the west side of the house, where it had its entrance. The house apparently consisted of a large square chamber entered from the west through an open vestibule (Fig. 10), with a smaller room or rooms adjoining on the northeast, but the plan in this direction may be incomplete.

The square chamber is of considerable size and is well preserved. It measures approximately 5.60 m. by 5.55 m. and is built with very solid substantial walls *ca.* 0.90 m. thick. These walls are 1.50 m. high, but only the upper third of this projected above the floor of the

house. In its lower part this foundation is much thicker than above. It is constructed in fairly regular courses, which from the floor of the room upward are roughly stepped so that the wall diminishes in thickness (Fig. 11).

Almost in the axis of the west wall is a very large doorway leading in from what seems



FIGURE 9. PLAN OF THE "HOUSE OF THE PITHOI" AND ADJOINING HOUSES

to be a vestibule, which occupies the full width of the square chamber. The doorway is 2.10 m. wide and is paved with a layer of irregular unworked stones, which thus form a threshold. The pavement does not, however, occupy the full depth of the opening, being *ca.* 0.15 m. narrower than the thickness of the wall. On the inner side of the threshold, in the centre of the doorway, is a rectangular recess in the pavement, *ca.* 0.25 m. wide by 0.12 m. deep. This recess looks as if it had been intended for a heavy wooden gatepost dividing

the doorway into two equal parts and helping to support a lintel. The doorway is in any case so wide that a double door would seem to be required. Set into the floor of the room on the south side of the doorway is a small block of *poros* in the top of which a circular depression has clearly been cut. This is without doubt a pivot hole in which a heavy wooden door pivot revolved; no similar stone was found on the north side of the door, but it may be presumed that one originally existed here also. Two such stones not *in situ* were brought to light in this area of the excavations. The pivot stone at the south side of the door is set



FIGURE 10. VESTIBULE AND SQUARE CHAMBER, HOUSE OF THE PITHOI, FROM THE WEST

some 0.30 m. into the room and away from the door. It seems, accordingly, that the door could not be shut without leaving a considerable crack; but this could easily be filled with branches or reeds and clay.

In the north wall of the room near the northeast corner is a second doorway, much smaller than the first. It leads into a second square chamber, which, though not so large as the principal room, is still of spacious proportions. Unfortunately the walls have been damaged in this region by constructions of Mycenaean times. The doorway is 0.95 m. wide. This opening is so narrow that there was probably only a single door; no pivot stone was found.

Along the east wall of the great room, beginning at the southeast corner, stood a row of large pithoi. Four were found in place, two practically complete, two in part only, and there may well have been originally two or three more. If so, they were destroyed when the Mycenaean walls in this section were built. The pithoi, decorated with raised incised bands,

and also provided with large cylindrical bosses (Figs. 111, 112), were no doubt storage jars for oil, meal, and other food supplies of the household. As a distinctive feature of the house they have been used to give a name to the building.

The floor of the room is made of trodden clay laid on a prepared bed, varying from 0.05 m. to 0.25 m. in thickness, composed of whitish clay, pebbles, potsherds, and the like. The



FIGURE 11. SQUARE CHAMBER, HOUSE OF THE PITHOI, FROM THE NORTH, SHOWING STEPPED WALL AND ROW OF PITHOI

variation in thickness of this bed is probably due merely to an attempt to lay a level floor on a sloping or irregular ground.

Scattered about on the floor of the room were found sixteen complete vases, four or five intact, the rest in fragments. They are chiefly typical Early Helladic shallow bowls, but among them is an interesting sauceboat, the spout of which is made in the form of a ram's head (PLATE X). Another vessel deserving of mention is a coarse cooking pot which still contained a large beef bone, undoubtedly the remains of the last meal prepared in the house before its destruction by fire (Fig. 105).

Several crude bricks, baked hard by the fire which destroyed the house, were found resting on the floor of the room, and there was also here a thick, hard layer of clay from similar dissolved bricks. The dimensions of the whole bricks are 0.14 m. to 0.15 m. thick, 0.18 m. to 0.20 m. wide, and more than 0.30 m. long.

Near the centre of the room an area approximately 1.00 m. broad seemed considerably harder than the surrounding floor and showed indications of having been baked by fire. This was clearly the hearth. Its outline is roughly a circle and its centre seems to have been slightly depressed.

Between the hearth and the west door on the floor lay a large mill-stone of the saddle-quern type.

Though the walls are very thick and solid and capable of sustaining considerable weight, the great size of the room makes it seem likely that pillars or posts were employed to assist



FIGURE 12. FRAGMENTS OF CLAY PACKING FROM ROOF, HOUSE OF THE PITHOI

in holding up the roof. No traces of such interior supports came to light, it is true, but if they were merely wooden posts or columns of crude brick they need have left no permanent indication. No stone bases were found.

The roof itself was undoubtedly flat. Some fragments of clay packing and surfacing give an idea of the manner of construction. Resting on the walls — and, as mentioned above, probably supported by posts — were heavy wooden beams. These were apparently not squared, but small tree trunks or logs left in the round and placed close together. Over these was spread a layer of clay, filling up the chinks and levelling the platform. Upon this was laid in turn a row of reeds, running not parallel to the heavy beams but diagonally across them. Several fragments of the clay packing were found, bearing on one side the impress of the large logs; on the other that of the reeds (Fig. 12). Above the reeds, finally, was laid a thick surfacing of clay. Fragments of this also were found, preserving on their lower side the impression of the reeds, and smooth on their upper surface. Several other hardened bits bore the impression of reeds both on their top and bottom; where these were employed is not clear.

A roof of this type of construction must have been very solid and heavy, requiring strong support. But at the same time it must have fulfilled its purpose entirely satisfactorily, being, with occasional attention, proof against the hardest rain.

The inner room, No. 5 on the plan (Fig. 9), entered through the narrow doorway mentioned above, is approximately square, having an average length from east to west of 3.90 m. and an average width from north to south of 3.70 m. Two later walls, probably Mycenaean, and a mass of stones in the southern part of this chamber have obliterated the original arrangements here. The southern end of the east wall of the room seems also to have been demolished or at least modified when House A was built; for the northwest corner of this latter is superposed on this wall. Along the north and east walls runs a narrow border of small stones set at the level of the floor. What the purpose of this arrangement might have been is not clear; perhaps it formed an edge to the clay pavement of the floor.

Apart from numerous potsherds, nothing of consequence was found in this room. Not far from the north wall and almost in the axis of the chamber stood the bottom portion of a small pithos which had been set into a hole in the floor and was thus preserved.

It is not certain whether there were other rooms belonging to the house beyond this room or not. The west exterior wall seems to extend on to the north, suggesting that the building continued farther in this direction; but the remains on this side are in a ruinous condition, and the excavations were not extended farther northward.

To the west of the large central room is a spacious open area (No. 3 on the plan) which may have served as a vestibule or porch. Its floor is *ca.* 0.30 m. higher than that of the room itself. It has a solidly built wall on the south, which is in fact a westward continuation of the south wall of the great chamber; but no corresponding wall appears on the north. The western boundary, however, is clearly marked by a broad line of flat stones resembling a pavement; it is somewhat irregular, but averages *ca.* 1.00 m. in width. The whole area measures about 3.50 m. from east to west by 5.45 m. from north to south, and can hardly be explained as anything other than a covered vestibule before the main entrance to the large room. If this explanation is correct, we might expect a row of columns along its west front, and there are in fact in the strip of pavement here a number of large flat stones which would serve admirably as bases for such supports. These need have been no more than simple posts of wood; and if they ever existed they have left no traces. The line of pavement may thus have been laid in order to mark the entrance to the covered portico, and may also have been useful in preventing rain water from washing in to make the earthen floor muddy.

The absence of a wall on the north side is something of a difficulty. At this point, however, native rock comes up to the level of the floor, and certain shallow pits cut here in Mycenaean times suggest that later adjustments may have removed all remains of Early Helladic construction if there ever was a wall here. At the same time the possibility of a simple porch open on two sides, north and west, must be admitted.

In the southeast corner of this covered portico stood the bottom of a small pithos fitted into a cutting hollowed out in the floor. Two similar pithoi, of which only the bottom part was in each case preserved, stood in similar cuttings in the northern part of the area.

Just to the southwest of this porch is a small isolated quadrangular room, No. 2 on the plan, of which the north wall is interrupted by the line of pavement bounding the court on

the west. Possibly there was an entrance to the room at this point. This small room is not exactly rectangular; it measures *ca.* 2.15 m. east and west by 1.45 m. north and south. Its purpose could not be determined; perhaps it was a stable or an outhouse connected with the court.

4. "House of the Snailshells" (Nos. 19 and 20 on the plan, PLATE II; Fig. 9).

Adjoining the "House of the Pithoi" on the south is a small building in a poor state of preservation, but presenting a plan which is fairly clear. This structure, built up against the



FIGURE 13. GENERAL VIEW OF CENTRAL AREA OF EXCAVATIONS FROM THE SOUTHWEST

south wall of the large house, is evidently another example of the two-roomed type of dwelling, similar to House A and House D described above. It appears to have been entered from the narrow alley which here widens into a small open space before the door — No. 18 on the plan.

The house consists of two rooms, 19 and 20 on the plan. The easternmost is approximately square, measuring roughly 2.00 m. on a side. In the south wall of this room is the outside door, which must have been very narrow, since the opening, indicated by a break in the wall, has a width of only 0.85 m. The western room is somewhat larger, with an average length of 3.30 m. and a width of 2.20 m. The partition wall between these two chambers does not now appear above the level of the floor; its upper part was of course constructed of crude brick. There is consequently nothing to indicate the position of the doorway

connecting these two rooms. In the south side of the western chamber is a break in the wall, 0.55 m. wide, which may perhaps mean that there was originally an opening here. If so, it led into a restricted space at the end of the alley, but walled off from the latter and closed also at its west end. Possibly this served as a small cupboard; in any case it is the most interesting feature of this house.

The floor of the two rooms, made of trodden earth and clay, was covered with quantities of snailshells, perhaps the débris from the final repast in the house. Scattered about were also a large number of nests of potsherds, allowing the more or less complete restoration of thirty-seven vases of various shapes and sizes, ranging from large jars to diminutive saucers.

West of this small house, and separated from it by a substantial wall, 0.60 m. high, in which there is no opening,¹ is a small area enclosed by walls on three sides. Whether this formed part of the house or not is not now evident. This area, No. 21 on the plan, is 2.40 m. wide and has a length east and west of 3.00 m. It seems never to have had a wall at its western end and must presumably have been open in this direction, though it was probably roofed. The floor is only about 0.15 m. above native rock, but this latter slopes rapidly downward toward the east. At the east end of the room and partly covered by the wall stands a small pithos of which only the lower portion remains, sunk into a depression in the floor. This appears to belong to an earlier period in the use of this area; perhaps there was then a doorway through the wall — or no wall at all. The open west end of the area was partly blocked by the small room, No. 2, mentioned above in connection with the House of the Pithoi, and this compartment too may well have been a dependency of that house.

5. House W (Nos. 23, 24, 25, 26 on the plan, PLATE II; Fig. 14).

On the south side of the alley (18) and west of the street (27) lies another complex of walls belonging to a system the plan of which is not so clear as might be desired. The house, if indeed it be a house, seems to have consisted of one or two adjoining rooms on each side, east and west, of a central courtyard paved with rough cobblestones (23, 24, 25, 26). The entrance to the court appears to have been from the south, where access is provided by means of another narrow lane (37) branching off westward from the main street. This lane probably served as the approach not only to House W, but also to House S, which will be described below. The lane varies from 1.00 m. to *ca.* 1.15 m. in width and is made in the same way as the alley already discussed above, except at its west end, where it is paved with small stones.

The courtyard (24) measures *ca.* 4.25 m. from north to south by 3.25 m. from east to west. Almost the whole of it is laid with large and small stones, forming a pavement which in the southern half of the area is considerably higher than in the northern part. On the south side there is an opening in the wall *ca.* 3.07 m. wide, and here there is a step down to the level of the lane which is paved with smaller stones. Nothing of consequence was found in the court.

The walls of the structure to the west of the court are in a very ruinous condition and not much can be said of the original arrangement here. The north and south lines are pre-

¹ It is possible that an original doorway here has been filled in with stone construction.

served and a small fragment of the west wall at the northwest corner makes it possible to fix the approximate dimensions of the building (23) as 3.45 m. from north to south by 2.45

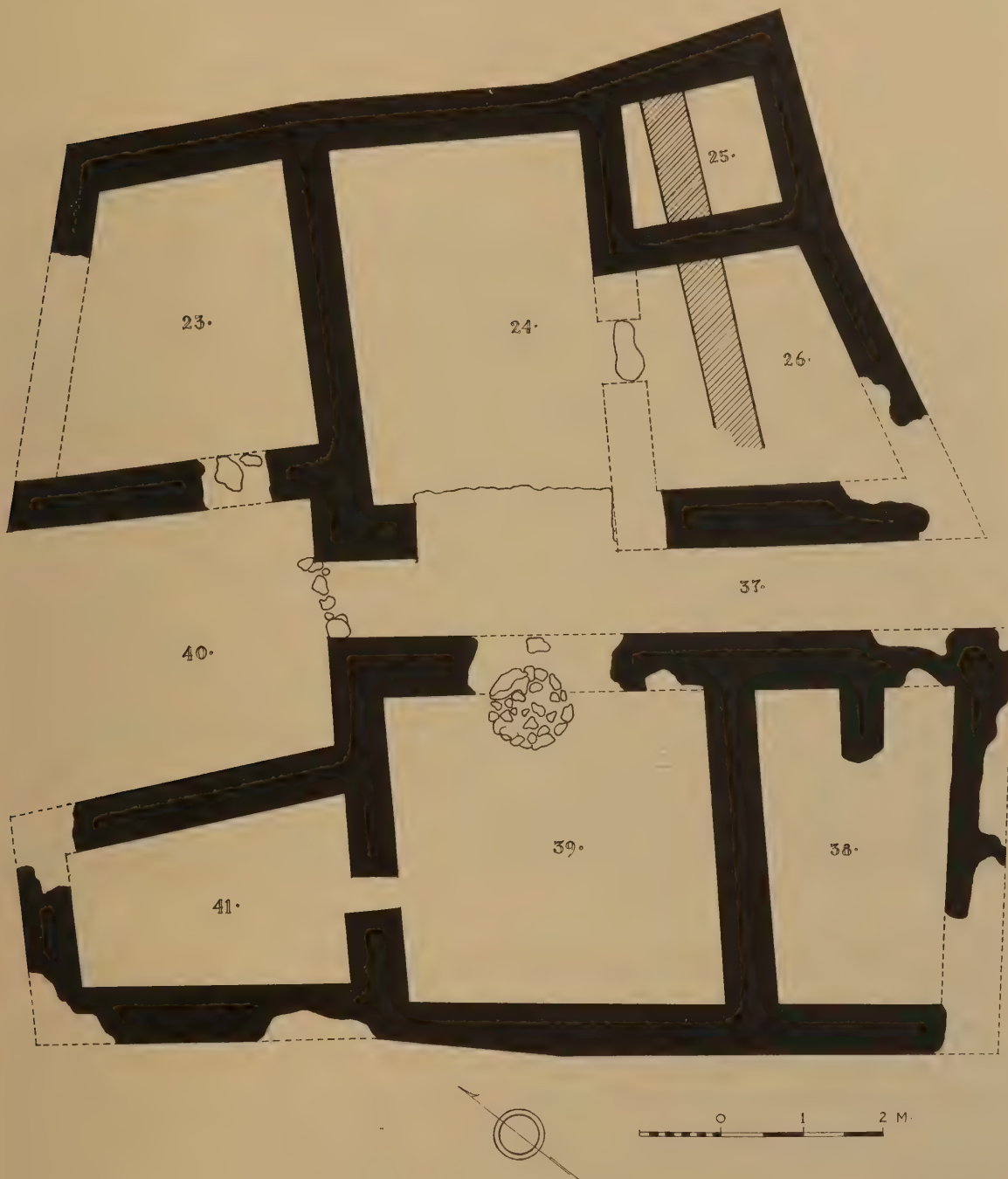


FIGURE 14. PLAN OF HOUSES W AND S

m. from east to west. Whether this was all one room or not could not be determined; a mass of small stones lying in disorder in an irregular line across the middle of the area may be the débris from a demolished partition wall which once divided the house into two small

rooms. At the very centre of the building is a large flat stone which may have had some structural purpose. In the southern half of this area was found the lower part of a large pithos embedded in the clay floor. Around it lay a considerable quantity of broken pottery among which were fragments of many sauceboats.

Just south of this ruinous building is an open area (40) measuring some 3.10 m. from north to south by more than 4.00 m. from east to west, surrounded by walls on the north,



FIGURE 15. HOUSE S FROM THE SOUTHEAST

east, and south. The western boundary has disappeared if there ever was one. A break in the north wall near the northeast corner suggests a doorway (*ca.* 0.90 m. wide) and a similar opening, 0.63 m. wide, appears in the south wall near the southeast corner. It is not clear whether this was a covered room or a small open court; it seems in any case to have belonged to the house just described (House W). No objects of importance came to light here.

The construction to the east of the court (24) is in an almost equally unsatisfactory state of preservation. Here we have, however, one clearly marked room (25) in the angle formed by the street and the alley. It is very irregular in shape, with an average width from north to south of 1.57 m. and an average length from east to west of 1.80 m. None of the corners are rectangles and the opposite walls are not parallel. The walls are well constructed solid foundations *ca.* 0.60 m. thick, and show no indication of a door. It is difficult to understand what use could have been made of a room so small as this.

Immediately adjoining on the south is a somewhat larger area (26) roughly trapezoidal in shape, measuring 2.50 m. to 3.10 m. in width by 2.80 m. to 3.25 m. in length from north to south. It is walled on the north, east, and south, but no foundation appeared on the west, where its limit is marked by the straight edge of the cobblestone pavement of the court (24). Apparently then we have here a roofed shed or shelter with an open façade toward the courtyard.

Beneath the floor of rooms 25 and 26 was revealed a heavy wall running north and south, which clearly belongs to an earlier period and must have been covered over when those



FIGURE 16. ROOM 39, HOUSE S, FROM THE SOUTH

rooms were in use. No corresponding wall came to light with which this foundation could be connected, and nothing further can be said regarding the structure to which it belonged. From the evidence of the pottery and other objects found in the deposit about the walls it is clear that there was no great chronological difference between the two periods.

6. House S (Nos. 38, 39, 41 on the plan, PLATE II; Fig. 14).

South of the lane (37) are the fairly well preserved walls of a house consisting of two or perhaps three rooms (38, 39, and 41). The building is oriented from southeast to northwest. The foundations are strongly built, from 0.60 m. to 0.70 m. thick, and are intact except at the south corner and at the north angle of the western room, possibly a later addition. The plan is essentially the same as that of House D, comprising a narrow outer room (38) and a large square inner apartment (39) to which a small additional chamber (41) is attached on the west¹ (Fig. 15).

Room 38, slightly wedge-shaped, and narrowing toward the southwest, measures *ca.*

¹ It is quite possible that House S and House W really belong together, forming a large L-shaped building, facing a court.

2.20 m. by 4.00 m. A foundation *ca.* 0.90 m. long projects into the middle of its north side, dividing this section into two small alcoves. The southern corner of the wall is missing, as already stated above, and it is possible that the outside door occupied this position. On the other hand, a narrowing of the foundation wall at the northeast end of the eastern alcove just mentioned suggests that an opening existed here, and this is the place which I believe the doorway to have occupied. The projecting wall is then explained as an effort to protect the entrance by causing it to lead in through a short passage. The floor of the room is made of well-trodden clay and earth. On it lay, in the inner corner of the west alcove, a nest of small pots, including several fragmentary "sauceboats." The position of the door leading to room 39 could not be determined.

Room 39 (Fig. 16) is clearly the main living room of the house. Though its corners are not perfect right angles, it is roughly square, measuring approximately 3.90 m. on a side. The north wall is not completely preserved, as a section 1.75 m. long is missing midway between the side walls of the room.¹ As this open space is thus almost in the axis of the room, it might be thought to mark the position of a large central door through which the chamber could be entered from the lane outside. This is the more probable explanation, but another is possible. At the north end of the room and almost symmetrically placed on the axis of the room is a well-made circle of cobblestone pavement which overlaps in part the line of the wall. This circle has a diameter of *ca.* 1.05 m. and rises *ca.* 0.25 m. above the clay floor of the room. If the space, now open in the wall, were a doorway, this high obstacle squarely in the way would make entrance into the room, to say the least, very awkward. Unfortunately the top of the paved circle was only very slightly below the present surface of the ground and has consequently suffered so much damage that its original condition cannot be determined with certainty. Although actual traces of fire are quite lacking, I think we may have here the remains of a hearth built against the north wall of the room which must have been hollowed out behind it — an arrangement which would give protection to the fire and assist in carrying off the smoke. The weakening of the wall at this point, since it must then have been constructed roughly in the form of a half arch, would sufficiently account for its destruction. A paved circle in many ways similar to this was noted in House K at Korakou, where, however, this explanation was not ventured (*Korakou*, p. 96). No trace of a hearth elsewhere in room 39 came to light. The small objects from the floor, consisting chiefly of fragments of pottery, were not numerous.

In the west wall of the room is a small opening slightly less than 0.50 m. wide. It is extraordinarily narrow for a door, and yet it seems clearly intended as a passage into the adjoining room 41. This latter looks like an addition to the house, as its walls do not bond into the foundations of the building. The room is trapezoidal in shape, being 2.50 m. wide at the southeast and narrowing to 1.75 m. at the northwest, with an average length of 3.45 m. Besides the narrow passage leading in from room 39 there seem to be two further doorways, one in the north and one in the south wall. Why a room of so diminutive size should have no fewer than three entrances did not become clear, nor was the use of the apartment explained. On the floor was found a nest of small vases, including tiny dishes and spoons.

¹ No foundations whatever are now preserved in this space; either they have been torn out or, perhaps, they never existed at all.

7. House E (Nos. 28 and 29 on the plan, PLATE II; Fig. 17).

On the east side of the street and opposite House W are the scanty remains of another small contemporary building. Lying near the edge of the hill it had the misfortune to fall within the area disturbed by construction in Mycenaean times, and the whole eastern part of it, comprising more than half its area, has thus been demolished. Enough remains, however, to permit the conjecture that the original plan was very similar to that of House D. The west side wall of the house, along the street, is preserved to a length of 5.70 m. and the beginning of a partition wall which seems to have divided the structure into two rooms (28 and 29 on the plan) still exists. Unfortunately both the north and the south ends are missing, the former having made way for a wall of the Mycenaean period.

8. House L (Nos. 2, 4, 5 on the plan, PLATE II; Fig. 18).

On the gradual northern slope of the hill a house which at first glance seems to be of a somewhat different plan came to light. It is an L-shaped building consisting of three rooms (2, 4, 5 on the plan) facing a small court (3). This house is well constructed with walls averaging 0.60 m. in thickness (Fig. 19). The two south rooms (4, 5) are clearly the chief rooms of the building and were surely closed and roofed. Room 4 measures 2.60 m. in width and has a length from north to south of 3.55 m. It appears to have been used mainly for storage purposes, as the remains of six pithoi were found in it (Fig. 20). In each case the base of the vessel was well preserved in its original position and inside it many fragments of its upper portion were recovered. So far as could be observed there was no regular order in the arrangement of the pithoi: three stood more or less in a row along the west side of the room, one approximately in the centre, and two somewhat farther eastward. All were set into the floor and made secure by a packing of small stones around them. No recognizable remains were found to show what these storage jars had once contained. In addition to the pithoi the objects brought to light in this room (4) included two spindle whorls (or buttons), two mill-stones of the saddle-quern type, a pounder, two whetstones, an oyster shell, and in the floor and just below it six good obsidian knives together with a celt of gray flint. The pottery recovered within the room comprised a large askos, two complete shallow bowls (one of which contained a cylindrical bead of chalcedony), and numerous fragments.

Room 4 was presumably connected by a door with room 5, but no evidence to establish its position came to light. It may have been somewhere near the north end of the wall separating

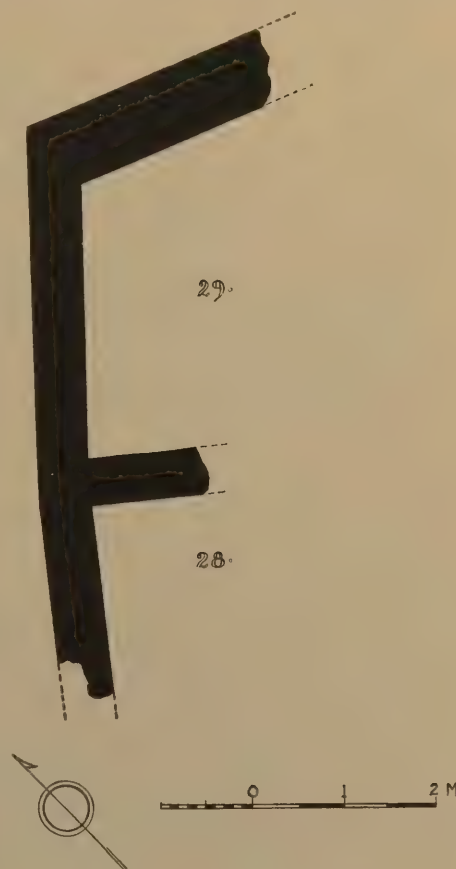


FIGURE 17. PLAN OF HOUSE E

the two rooms, at a point where the construction is now in a very damaged condition.

Room 5, measuring *ca.* 2.50 m. by 3.50 m., is only very slightly smaller than room 4. Its walls are well preserved on the east, south, and west; the east end of the north wall has, however, almost completely disappeared, and since no evidence was found to mark it elsewhere, a door, opening upon the court, may perhaps have occupied this place. In room 5

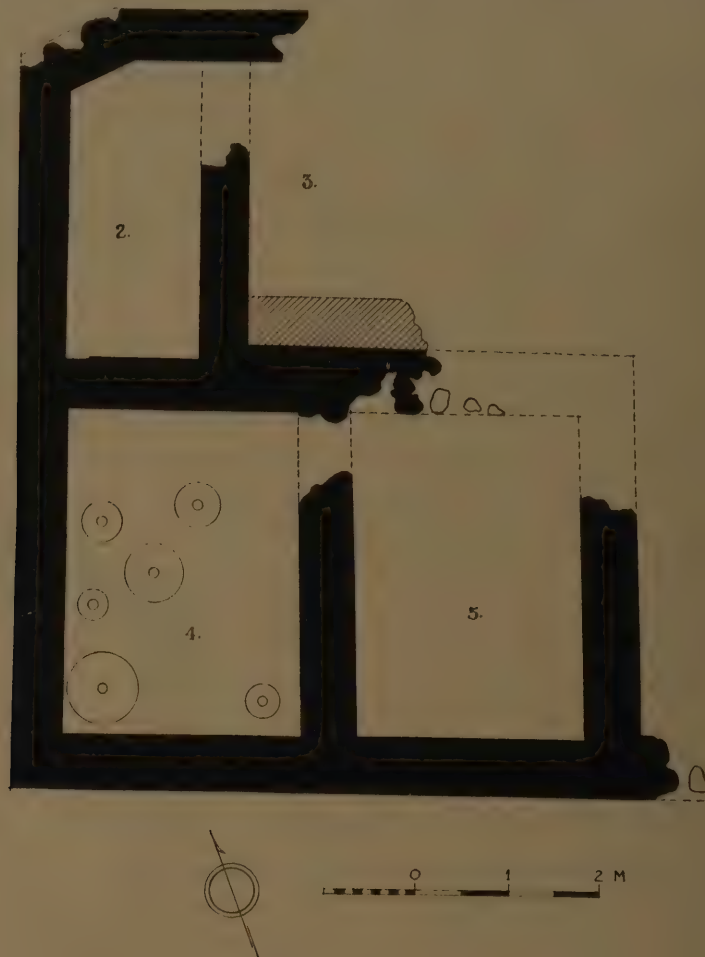


FIGURE 18. PLAN OF HOUSE L

were found a celt, a whetstone, and almost a dozen obsidian blades (on, or below the floor), the major part of two "sauceboats" and a jar or jug of good fabric with a curious oval mouth, and one complete cooking vessel together with many fragments of another. The cooking in this simple establishment was thus apparently done in this room; no traces of a hearth could be observed, however, unless four small stones still resting on the earthen floor in the northern part of the chamber once formed part of it. They showed no signs of burning.

Room 2 is a smaller apartment in the north wing of the house, with dimensions of 3.25 m. from north to south by 2.25 m. It seems to have been in part at least open toward the court, as its east wall terminates 1.15 m. before reaching the northeast corner and this opening

seems unduly large for an entrance into so small a room. There is no trace of a door leading into room 4; and this small room (2), though evidently belonging to House L, was apparently, therefore, a separate unit, accessible only from the court. What its specific purpose was could not be learned. Inside it were found a complete askos, a diminutive patera, the greater part of a spoon or ladle, and many potsherds.

The east wall of the room is peculiar, since it turns at right angles and runs eastward alongside the north wall of rooms 4 and 5. Perhaps this foundation was not intended to support a high wall, but merely a low bench or seat bordering the south side of the court.



FIGURE 19. HOUSE L FROM THE EAST

No wall was discovered enclosing the court on the north and the east; it seems to have been merely an open space occupying the interior angle of the "L" of the house. It possessed a well-trodden floor of light clay, in which three small storage pithoi had been set. Only the bases of these pots remained in place; the rest had been broken and torn away as a result of cultivation, since the surface of the field was no more than 0.35 m. above the level of the floor. On the clay pavement were found five good blades of obsidian and fragments of pottery in some quantity. The large number of obsidian knives from the court and rooms 4 and 5, twenty-three all told, suggests that in House L we may perhaps have the residence of a prehistoric dealer in cutlery.

Beyond the wall to the west of room 2, chiefly in the area marked 1 on the plan, a considerable quantity of shattered pottery came to light, from which it was possible to put

together two good "sauceboats," a jug, and several smaller vases. Perhaps this was the rubbish heap, where behind the building the broken dishes and the débris of the household were discarded.

As remarked at the outset, House L impresses one at first sight as being of a different type from the other Early Helladic houses at Zygouries. But if room 2 is really, as seems in fact to be the case, a separate unit entered only from the court, we have remaining in



FIGURE 20. HOUSE L FROM THE NORTH, SHOWING REMAINS OF PITHOI IN ROOM 4

rooms 4 and 5 exactly the same arrangement of a two-roomed dwelling that we have seen illustrated in Houses D, A, and others.

9. House Y (PLATE I; Fig. 21).

Trench XI on the southwest slope of the mound brought to light a complex of walls which proved extremely difficult to disentangle. These remains lay some 0.20 m. to 0.30 m. below the surface of the ground and had doubtless been disturbed by ploughing; furthermore an early Christian grave and some other digging and construction in this region, dated by the Byzantine potsherds occurring in the same context, had caused no little confusion.

In the eastern part of the trench we seem to have the scanty remnants of foundations of two successive houses, one of which (4) apparently had a door at its southern end, opening on a narrow passage or street (7). The complete plan of these houses could not be made out. Room 4 at all events is of some size, measuring *ca.* 4.20 m. from east to west and probably

more than 4.25 m. from north to south. In this room, apart from the usual quantity of potsherds, was discovered an important button seal of terracotta, the first of its kind among the relics of the Early Helladic Period on the Greek mainland. From a small pocket between walls just southeast of the doorway (7) a mass of pottery was extracted, yielding among other vases two "sauceboats" and a shallow bowl.

10. House U, the "House of the Dagger" (Nos. 2 and 3 on the plan, PLATE I; Fig. 22).

Not far to the west of the foregoing, another building was uncovered, the original arrangement of which is hardly easier to comprehend, though here at least the remains appear to

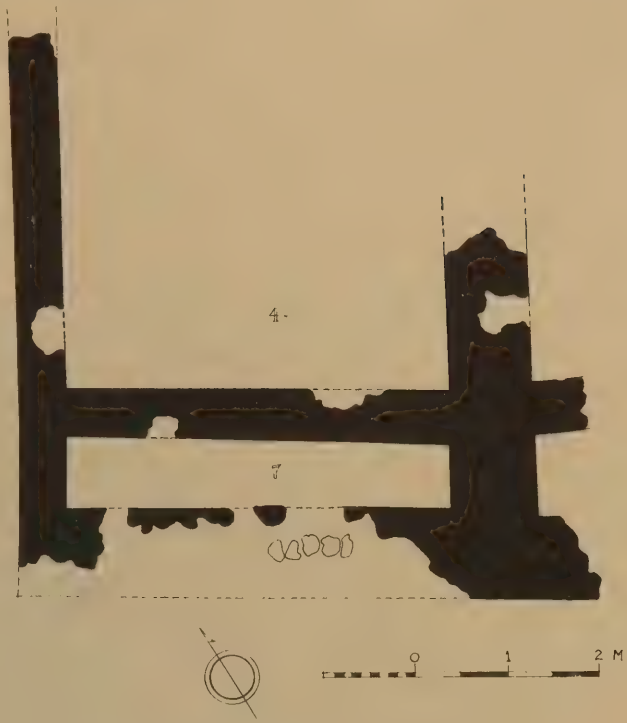


FIGURE 21. PLAN OF HOUSE Y

belong to one period alone. This is House U, comprising the areas numbered 2 and 3 on the plan. Whether these were actually roofed and closed rooms or not is a puzzling question. Area 2 in any case seems to have been covered. It has substantial walls, 0.50 m. to 0.60 m. thick, on all four sides and measures 2.60 m. wide by 5.25 m. long from north to south (outside dimensions), forming a room *ca.* 1.50 m. by 4.00 m. There is no evidence for the position of a door or doors. The room had a good floor of clay, small stones, and potsherds; on, or in, it were found a bronze awl, a "stopper" of terracotta, and some chips of obsidian.

The floor continued eastward, extending over area 3, which is much larger. Of a roughly trapezoidal shape, it has an average width from east to west of 3.75 m. and a length of *ca.* 4.50 m. (Fig. 23). The walls surrounding this space on the north, east, and south consist for the most part of two

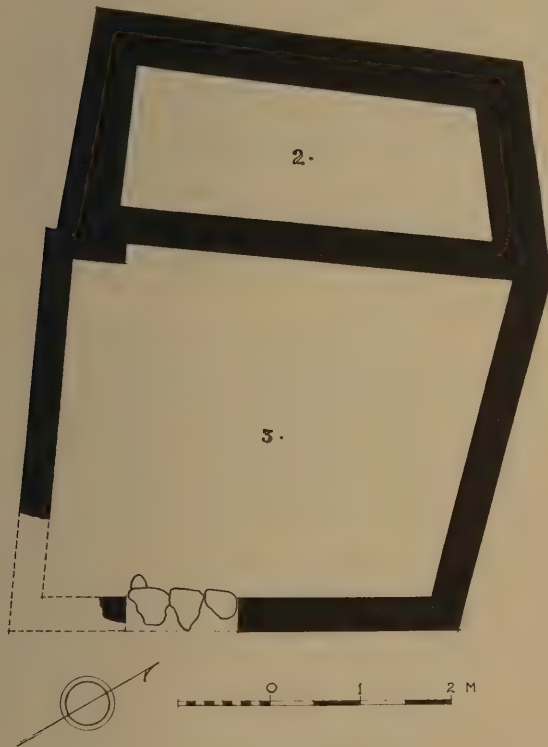


FIGURE 22. PLAN OF HOUSE U

courses of stones about 0.35 m. thick, and do not appear to have supported a high superstructure. Perhaps they formed merely the boundary of an uncovered courtyard; in such case the roofed dwelling must have been limited to the single room occupying the whole width of the court at its west side. In the northeast part of the "court" a few unworked stones and irregular patches of red clay (perhaps from dissolved crude brick), much hardened by fire, suggest the possibility of a hearth. Near the northwest corner of the "court" was a small pit roughly lined with small stones, having a diameter of *ca.*



FIGURE 23. HOUSE U FROM THE NORTHEAST

0.80 m. and a depth of about one metre. Neither its date nor its purpose could be certainly determined, though it may perhaps have been a "bothros" belonging to the Early Helladic Period. A smaller pit, not far from the southwest corner of the "court," seems to date from comparatively recent times, as it contained a number of Byzantine potsherds. On the east side of the "court," finally, were found in a shallow depression in the floor a few small crumbling bones — the scanty remains of an infant burial. The interment must have taken place subsequently to the abandonment of the house as a dwelling, after the level of the ground had risen considerably, since the bottom of the grave was only slightly sunk into the floor of the "court"; it should probably be assigned to the Middle Helladic Period, though its exact date could not be ascertained.

On the floor of the "court" were found a flint saw, three obsidian blades, three "whorls" or buttons, a shallow bowl, and a small spoon or ladle; in the layer of stones forming the

floor, a flint, a mill-stone, a number of boars' tusks, a "stopper" of terracotta, the head of an animal (or a bird) of the same material, and a spindle whorl. A nest of pottery lying in a hollow among the foundations just east of the "court" produced an askos, two jugs, seven shallow bowls, a ladle, a "sauceboat," and a shallow dish or plate.

Some distance below the floor of the court a clearly marked stratum of blackened earth points to an earlier period of occupation of this region. This burnt layer, *ca.* 0.10 m. thick,



FIGURE 24. WALLS IN TRENCH V, FROM THE EAST

extended under and beyond the walls of the court, but no walls which could be associated with it were revealed.

South of House U there appears to have passed a narrow street, paved with a packing of small stones, sherds, and various *débris*. In the area marked 9 on the plan it is particularly clear and we seem to have the corner of two such streets intersecting at right angles. Among the stones of the pavement in this angle were found a well-preserved bronze dagger (PLATE XX, No. 25), a flat bone implement, and a bone spool. Just to the west of the intersecting streets a well-built wall, forming a corner, probably indicates the position of another house; but the foundation is preserved for only a short distance and almost nothing remains of the building.

Walls of structures belonging to the Early Helladic Period were encountered in other trenches almost everywhere on the hill of Zygouries and below it in the sloping fields to the

west, but no further house plans could be determined. In Trench V part of a room with a well-made floor came to light and perhaps a complete house exists at this point; the depth of the deposit here, however, and the remains of later structures at a higher level (Fig. 24) made it necessary to limit the area excavated to a comparatively narrow trench.

Two pits cut in native rock side by side near the west edge of the hill may possibly be "bothroi" dating from the Early Helladic Period. They have approximately the shape of a large, rather spherical pithos, one, measured at the top, being 1.10 m. in diameter and swelling to 1.45 m. at its widest point, the second 1.45 m. across at the top and 1.85 m. at its greatest diameter; and the two are connected about half way down by an irregular hole. On the south side of the easternmost pit there seems to be a well-cut opening, leading perhaps into a third pit. This was not excavated. They were found filled with black earth, stones, and miscellaneous débris, and contained also some coarse Byzantine pottery. If they were originally constructed in Early Helladic times they must have been rediscovered and put to a new use in the Byzantine period; and the connecting hole between them is no doubt contemporary with their conversion into a cistern. The possibility that they are Early Helladic is strengthened by the discovery farther to the north, in the steep west slope of the hill, of remains of similar pits which can be dated from the objects found in them. Owing to the wearing away of the rock here, only the lower part of these "bothroi" is preserved, in the form of three overlapping circular cuttings with rounded bottom. Though now of no great depth, they were filled with a mass of Early Helladic pottery, from which many vases have been more or less completely put together. In a long trial trench skirting the west side of the hill two further "bothroi" were discovered. One, almost filled with large stones, produced also coarse Byzantine pottery, as well as some Mycenaean and some Early Helladic sherds. The other, cut partly in rock, and reaching a depth of 3.20 m. below the present level of the ground, yielded a large quantity of exclusively Early Helladic potsherds.

II. MIDDLE HELLADIC PERIOD

Architectural remains of the Middle Helladic Period were very scanty, consisting merely of short disconnected pieces of walls which gave little or no evidence for complete plans of houses. They lay chiefly on the western part of the hill in a region apparently much disturbed in later times. A curved wall in Trench VI may possibly have belonged to an apsidal house similar to those at Tiryns, Korakou, and elsewhere, but the remains are too incomplete to allow more than the conjecture. Deep pits sunk into the east slope of the hill revealed a thick Middle Helladic layer below the Late Helladic, and here also a short piece of well-built wall appeared. Some allowance must naturally be made for later disturbance and destruction, but in view of this scanty evidence it can hardly be doubted that the Middle Helladic settlement was a place of far less importance and prosperity than the Early Helladic town, which occupied the whole hill with its numerous houses closely crowded together.

III. LATE HELLADIC PERIOD

In Late Helladic times the settlement seems to have spread down into the flat ground to the east and west of the hill. Walls of houses, dated by the accompanying pottery, may be

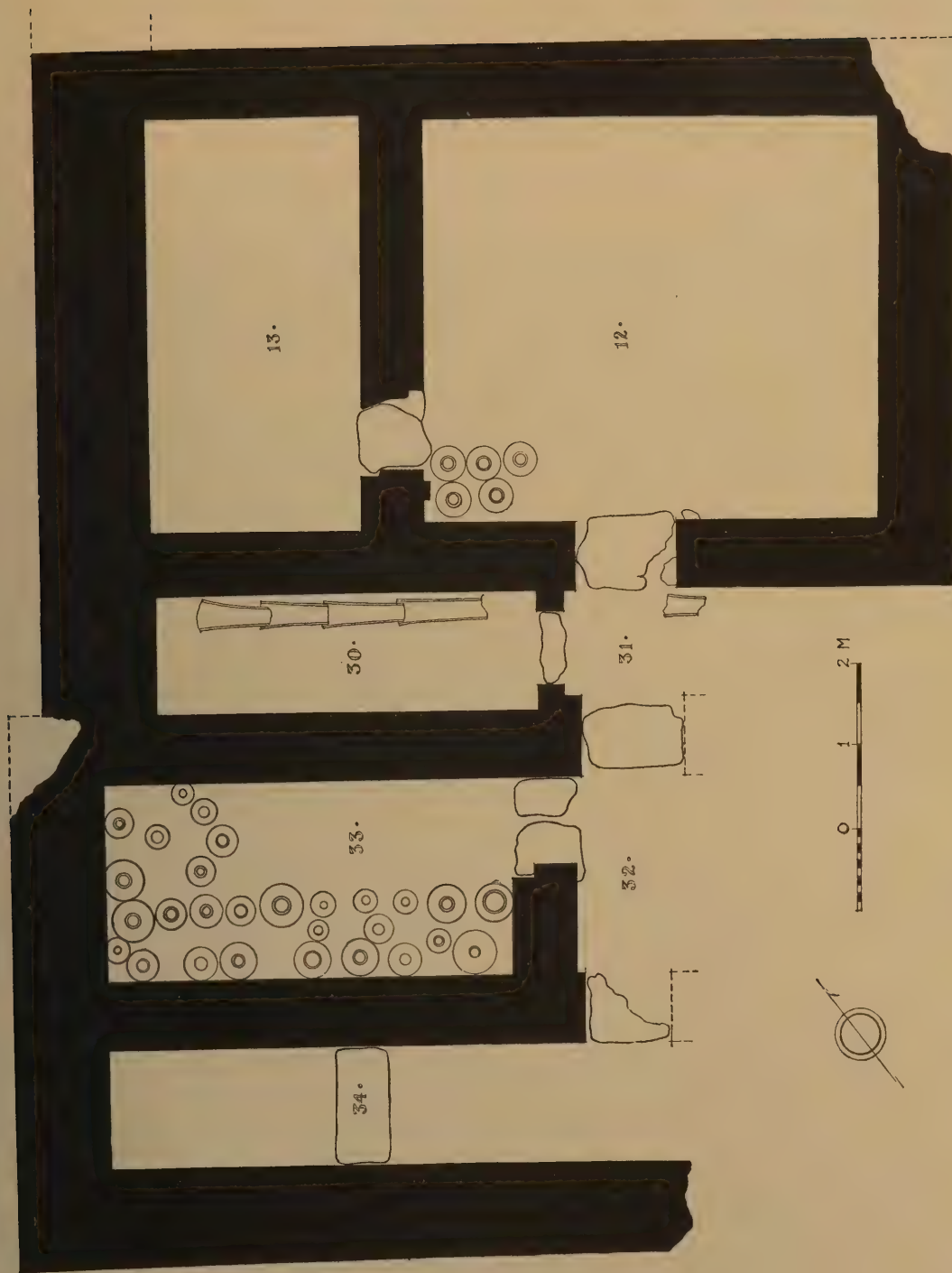


FIGURE 25. PLAN OF THE POTTER'S SHOP

seen in the banks of a small stream which flows northward in a deeply cut bed some fifty metres east of the mound. A trench between this stream bed and the edge of the hill also revealed foundation walls and traces of floors, one with a large terracotta vessel resembling a bathtub still resting on it. This whole region seems, however, to have been denuded to a considerable extent by the overflowing of the stream during heavy rains, and not much now survives of these Mycenaean constructions. In the fields on the west side of the hill, trial trenches likewise brought to light many walls with which quantities of Late Helladic III potsherds were associated.



FIGURE 26. THRESHOLD SLABS IN "CORRIDOR" OF THE POTTER'S SHOP

The top of the hill has also suffered denudation and perhaps its whole surface was cut down and levelled off in Byzantine times, as mentioned above. Consequently there are few Mycenaean remains, consisting merely of short unconnected bits of walls, and here and there a small pit filled with Late Helladic potsherds.

Against the steep eastern slope of the hill, on the contrary, a deep accumulation of earth and débris has covered and preserved a considerable part of a large building belonging to the third Late Helladic Period. Interesting in itself, this structure, House B, is also, on account of the vast amount of pottery found within it, worthy of some description.

House B (Nos. 12, 13, 30, 31, 32, 33, 34 on the plan, PLATE II; Fig. 25).

The space for the building was provided by making a broad horizontal cutting into the sloping hillside and dumping the earth thereby removed, together with a great mass of stones, upon the lower ground to the east until a level platform was formed. The construction rested, therefore, in part on solid earth, in part on made ground. The western portion, lying on its firm shelf and protected by the deep western edge of the cutting, has thus been

fairly well preserved; while the eastern half has in the course of time been carried down the hill and disappeared. Consequently only a part of the ground plan can now be certainly determined, though the limit of the stone fill on the east allows the line of the east wall to be conjectured approximately. The walls are preserved to a height corresponding to the level of the surface of the ground before excavation, and, therefore, rise gradually from east to west, following the slope of the hill, to their greatest height at the inner extremity of the



FIGURE 27. ROOM 13, POTTER'S SHOP, FROM THE SOUTH

shelf. Solidly built of large and small unworked stones laid in clay, these walls seem calculated to support a very heavy superstructure. The interior partitions average *ca.* 0.80 m. in thickness, while the exterior walls were certainly much more massive, though their exact dimensions can no longer be recognized.

The building is oriented with its longer axis running about 30° east of north; the portion of it brought to light forms a rectangle some 15 m. long by 11.50 m. wide. This was divided into a series of rooms of various sizes to which access was apparently provided by means of a central passage parallel to the long axis of the building. How many chambers there were originally cannot now be stated with certainty. Four complete rooms (13, 30, 33, 34) west of the passage were cleared and part of one on the north (12); but there were no doubt others on the east which have fallen away down the slope of the hill. The passage itself (31 and

32) can be recognized only by three large threshold slabs of as many successive doors in a row (Fig. 26); whether it was actually a closed corridor the east wall of which has now totally disappeared, or merely formed a line of passage by a succession of doorways through adjoining rooms is not absolutely clear. The latter supposition is the more probable, as the



FIGURE 28. COOKING POTS AS THEY FIRST APPEARED IN ROOM 13

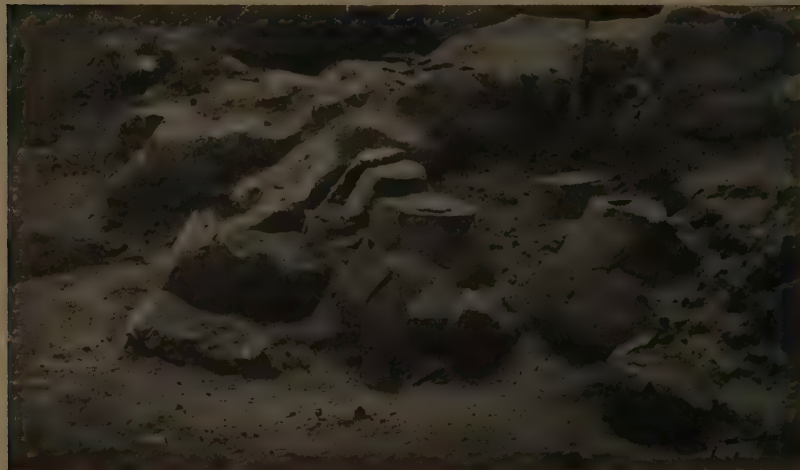


FIGURE 29. SOUTHWEST CORNER OF ROOM 12, SHOWING FIVE CRATERS,
FROM THE NORTH

three threshold blocks, which certainly mean that there were doors, would hardly have been necessary so close together in a narrow closed corridor.

Room 13 in the northwest corner is one of the best preserved, its west wall still rising to a height of 1.40 m. (Fig. 27). The room has a width of *ca.* 2.55 m. and a length of *ca.* 4.90 m. from north to south. On the east side, near the southeast corner, is a doorway *ca.* 1.05 m. wide; this was probably the only entrance and the only source of natural light for the room. A large slab of rough limestone occupying more than the full thickness of the wall forms a stone threshold. The walls were covered with a thick coat of rather coarse plaster which

shows no trace of paint. The floor was made of hard earth and clay. The room itself is thus a simple chamber with no features especially unusual in Mycenaean buildings. Within it was found a store of pottery of noteworthy proportions. It contained more than five hundred unpainted deep bowls, probably for cooking purposes, some seventy-five small saucers, twenty small jars with three pierced lugs, three enormous stirrup vases, ten smaller pots of the same shape, and water jars, basins, ladles, cups, and other vessels, in smaller numbers.



FIGURE 30. SOUTHWEST CORNER OF ROOM 12, SHOWING DOORWAY TO ROOM 13, AND THREE CRATERS STILL IN THE POSITION IN WHICH THEY WERE FOUND

These vases were for the most part shattered, having been crushed by the débris which fell from above when the house was destroyed; but their original arrangement in the room was fairly clear. The cooking pots stood mainly at the south end of the chamber, packed one inside another in rouleaux, set close together on the floor (Fig. 28). Near them, just west of the doorway, were most of the saucers, the small jars, and the ladles. Farther to the north, near the centre of the room, were found several basins and the smaller stirrup vases, while the large ones and a water jar stood apparently against the east and west walls. Many cooking pots were brought to light here also, as well as in the northern part of the room, but not in such quantities as in the southwest corner.

The room immediately adjoining on the east (12) is of larger size than the foregoing, but not so well preserved. It measures *ca.* 4.95 m. from north to south; its east wall has been

completely destroyed, but if, as suggested above, we take the limit of the stone fill as marking its approximate line, we may conjecture a chamber almost square in shape. Considerably more than half of it has been swept down the declivity eastward, as the present slope of the hill cuts through the floor only *ca.* 2.00 m. beyond the west wall. The room had two doors, one already described, opening into room 13, and one leading southward. The position of the latter is recognizable from the large unworked stone slab, 1.21 m. wide, which once

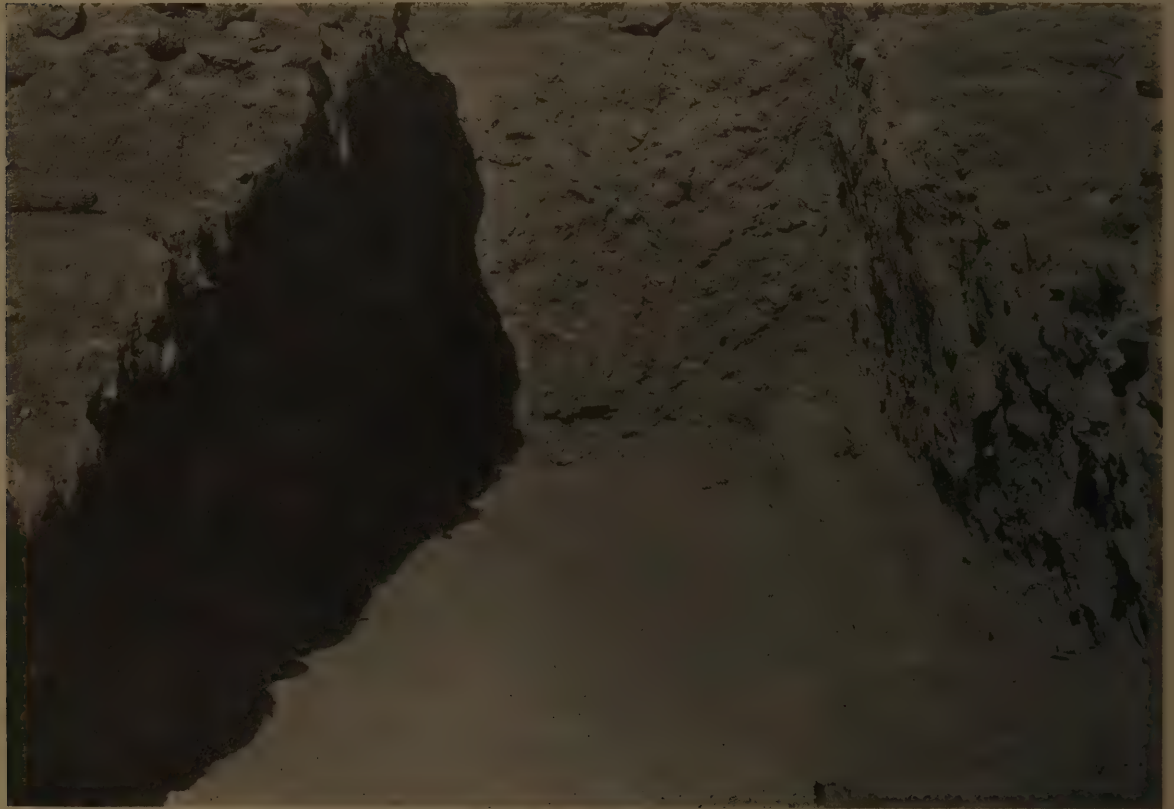


FIGURE 31. ROOM 30, POTTER'S SHOP, FROM THE EAST

served as its threshold. On the floor along the west wall, north of the door to room 13, was found another great mass of pottery. The shape chiefly represented here was the cylix on a high stem: almost seventy specimens with painted decoration can be counted, and four or five times that number of unpainted examples, among the fragments recovered. In the angle of the room south of the door stood five huge unpainted craters, bottom upward, in two rows (Fig. 29). These latter, as appears on our plan, must have interfered seriously with communication through the doorway (Fig. 30).

Room 30 has the shape of an extremely narrow magazine, being *ca.* 4.65 m. long and only 1.40 m. wide. It was entered from the east through a door some 0.90 m. wide, the stone threshold (0.90 m. x 0.40 m.) of which is still *in situ*. The room had a well-made floor of hard whitish clay. Comparatively little pottery came to light here, the most interesting vase being a three-legged stand, perhaps intended to hold a cooking pot over a charcoal fire.

The striking feature of the room is a large open drain running eastward alongside the north wall (Fig. 31). It is made of U-shaped sections of terracotta pipe, four of which were found in place. These sections vary slightly in size, but average about 0.92 m. long. At the lower end they measure 0.24 m. across, at the upper 0.38 m., splaying out widely in order to take the lower end of the next section. The westernmost section is set slightly above the floor of the room, and from this point the drain slopes downward toward the east. It must



FIGURE 32. ROOM 33, POTTER'S SHOP, FROM THE WEST, SHOWING TWO ROWS OF CRATERS ALONG THE SOUTH WALL

have passed under the east wall of the magazine, as several fragments were brought to light in room 31, but this part of its course has been demolished, apparently by large stones falling from above, and there was no evidence to show how the drain was carried out of the house. The purpose of so broad and capacious a drain in this narrow room is not clear; perhaps it carried off the water collected in the drain trap which was discovered at a higher level to the west of room 30 (see p. 38), or perhaps it brought the water needed in the potter's workshop.

Room 33 is 4.95 m. long and has a width of 2.45 m. Its inner end is set back *ca.* 0.65 m. west of the line of the west wall of rooms 13 and 30. This fact suggests that there may have been in the outer east wall of the building a jog or set-back similar to those so familiar in Mycenaean constructions elsewhere. In the east wall of the room immediately adjacent to

the northeast corner is a doorway *ca.* 1.00 m. wide, which has a threshold made of two slabs of limestone laid side by side with a fairly wide joint at the centre of the opening. The walls of the chamber, which are well preserved (the west wall still stands to a height of 1.65 m.), were finished with a thick coat of rough plaster, some of which still remains *in situ*. The floor is of light clay.

On the floor in the southern half of the room stood two parallel rows of large pots bottom upward, some almost intact, others crushed and shattered (Fig. 32). The northern row con-

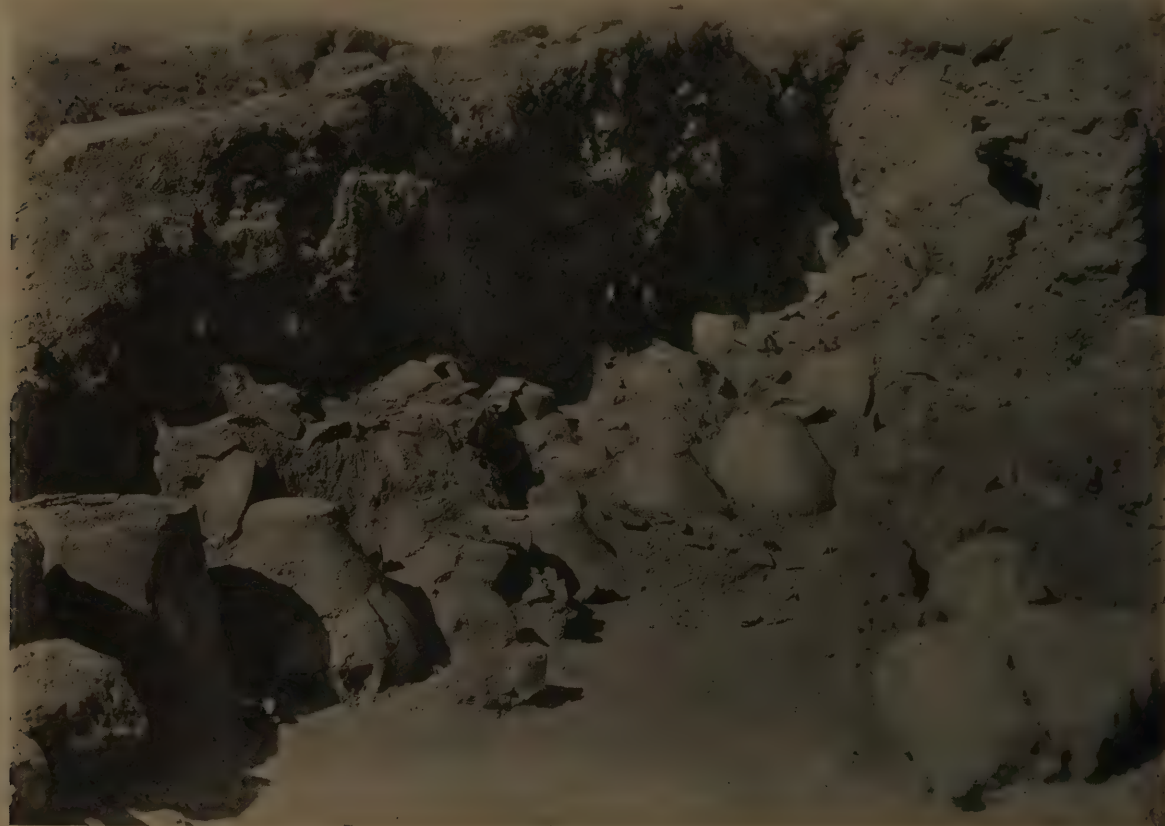


FIGURE 33. ROOM 33, POTTER'S SHOP, FROM THE EAST

tained ten vessels, the easternmost a sort of cylindrical jar, the rest craters; and there was probably an equal number in the southern row, which had, however, suffered greater damage. The great mass of fragments of similar vases lying upon and about these craters indicates that here too originally the pots were stacked one inside another in rouleaux, as in room 13. Upon them had been placed likewise a number of capacious basins and jugs, while the west end of the northern half of the magazine was piled high with similar vases. Cooking pots like those from room 13, were scattered about helter skelter, together with some smaller vessels (Fig. 33). The east end of the northern half of the room, on the other hand, was almost free of pottery, probably because a passageway just inside the door had to be kept open to provide access to the store.

Room 34, parallel to 33 on the south, is again long and narrow, having a width of only 1.75 m. It is divided into two parts by a large slab of limestone extending across the room. Apparently this is a threshold set at a level of two steps, *ca.* 0.50 m. higher than the south threshold slab in corridor 32. The west limit of the western part of the room was not clearly marked and apparently there was no levelled floor. The room was filled with large stones in a mass rising gradually westward. Along the south wall a drain made of cylindrical terracotta pipes, in part covered by stone slabs, descends from the higher level west of the room. In the eastern part of the room the terracotta drain is succeeded by a channel built of stones with small slabs laid across it as a cover. Accordingly it seems likely that a flight of steps once occupied this end of the building, by which one might ascend from the pottery magazines to the main floor above, and that the stairway could be closed by a door on a sort of landing.

Such a stairway must have been needed, for it is certain that the rooms just described were merely basement or cellar storerooms and that the chief apartments of the building were on the upper floor. All the rooms were found filled with burnt debris; quantities of fragments of crude brick fused and hardened and stones partly calcined as the result of a conflagration, showed that the destruction of the house was due to fire and that a whole upper story had fallen in upon the rooms below. One brick came out almost intact; it is 0.35 m. long, 0.22 m. thick, and 0.085 m. high. The abundance of fragments of similar bricks indicates clearly that the walls of the upper story were built of this material. Some of these fragments still preserved a fine coat of plaster on one side, from which fact it is evident that the walls of the chief apartments were carefully finished. In not a few cases this plaster bore traces of painted decoration, and among the fragments recovered, two different styles of fresco may be distinguished (PLATE III). One shows a fairly fine coat of plaster, almost white in color, varying from 5 mm. to 13 mm. in thickness, with a smooth surface. On this are painted patterns in good colors: blue, two shades of red, yellow, white, and black. Blue is the commonest; yellow, red, and black seem to be subsidiary. Unfortunately the pieces are very small, and the patterns are not recognizable; one fragment looks as if it had blue spirals on a white ground, but the color scheme may have been just the reverse. A good example is shown in PLATE III, Nos. 3-7.

The second style exhibits a somewhat more porous plaster, gray in color and in almost every case damaged by fire, ranging from 4 mm. to 12 mm. in thickness. Many of the pieces are still attached to fragments of crude brick from the walls of the building. Here the material is not so shattered and some simple patterns can be recognized. One shows broad vertical bands of large spirals bordered by transverse parallel lines (PLATE III, No. 1). The spirals seem to be done in white with black outline, and the interspaces are filled with red. Another pattern shows large zigzags in thin red lines on a blue ground — reminiscent of the design on some of the square panels of the floor in the court of the Palace at Mycenae. (PLATE III, No. 2).

The fragments of the first style were found chiefly in the vicinity of the drain-trap mentioned below, numbered 15 on the plan, that is, on the top of the hill. The examples of the second style came from the Potter's Shop and had fallen down from the upper story.

The floor of the upper story must have corresponded fairly closely in level with the

surface of the hill itself farther westward, and here it is possible that the building extended considerably to the west beyond the lower story. Indeed it may have been constructed on successive steplike terraces similar in arrangement to those of the Palace at Mycenae. Owing to the ruinous condition of the foundation walls in this region its western exterior line could not, however, be definitely determined. Amidst the mass of stones some 2.50 m. west of room 30 a carefully made drain-trap was found and cleared (15 on the plan). It is a small pit of irregularly quadrangular shape, measuring roughly 0.80 m. on a side, but the opposite sides are not parallel. The sides of the pit are built of stones, which on the east and north are very large, covered with a coat of good waterproof plaster. The pit is 0.60 m. deep and has a well-made floor of similar plaster sloping downward from west to east. At the north corner a narrow channel leads into the box at the level of the floor and directly opposite, at the south corner, a second channel provides an exit eastward. Perhaps this channel once emptied into the drain which runs through room 30; if so, the connecting section has been destroyed. The pit was filled with earth and débris, containing fragments of six figurines of terracotta, a steatite lentoid gem, many fresh-water mussel shells, and a slender bronze knife with remnants of an ivory handle (Fig. 190, No. 1). The drain-trap was probably in some way connected with, or formed part of the plumbing system of the house, but its exact function did not appear.

The vast amount of pottery found in the storerooms of this house (representing many more than one thousand vases) leads one to conjecture that it was a potter's establishment. The vases were all quite unused and some of those recovered intact looked, when cleaned, as fresh as though made yesterday. They seem to have been stored, as recorded above, in good order, distributed roughly by shape into three rooms. In view of their great number it is hardly likely that they were manufactured at any considerable distance from their place of storage. It is indeed quite possible that the workshop occupied the eastern rooms of this very building, which have unfortunately suffered almost complete destruction; and here too, perhaps, stood the kiln, though no traces of it at all were observed in the course of the excavations.

CHAPTER III

THE TOMBS

A. THE SETTLEMENT

SEVEN graves were discovered within the settlement of Zygouries at various points on the hill. Three of these appeared to date from Byzantine times or later and require only passing mention here. They were simple earth burials in which, as the well-preserved bones showed, the body had been laid out at full length on its back with the head to the west and the arms folded across the breast. No objects were found in these graves,

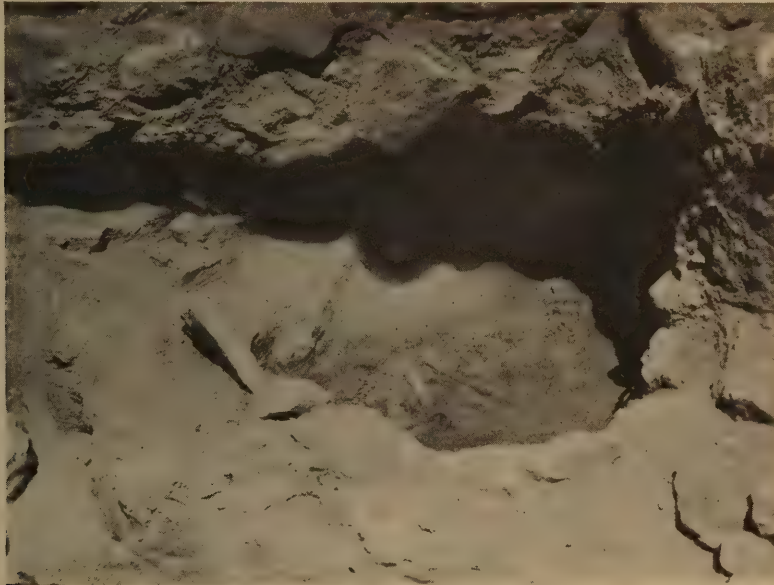


FIGURE 34. TOMB I, FROM THE WEST

but in one case two iron heel-plates beneath the feet indicated that the deceased had been buried wearing heavy boots.

The other four graves were probably all interments of the Middle Helladic Period and will be described in more detail.

TOMB I. Trench VI, in the central part of the mound, speedily revealed the usual maze of walls. Some of these, very close to the surface of the ground, appeared from the pottery found about them to be of Byzantine date, and in this section were two of the Byzantine graves. Other walls at slightly lower levels undoubtedly belonged to prehistoric buildings,

though no complete plan could be recovered. In part covered by the intersection of two walls (perhaps of mediaeval construction) and at a depth of *ca.* 1.00 m. below their top, a Middle Helladic tomb was found. Irregularly oval in shape, measuring *ca.* 1.75 m. by 1.10 m. at its widest and narrowest points, it was surrounded by a ring of rather small stones laid in a single line (Fig. 34). Within this enclosure lay the skeleton in contracted position on its right side with the head to the north and facing west. The bones were fairly well preserved, though the skull had been somewhat damaged and had sunk forward to the north-west. The arms were bent at the elbow so that the hands came before the breast or the face;

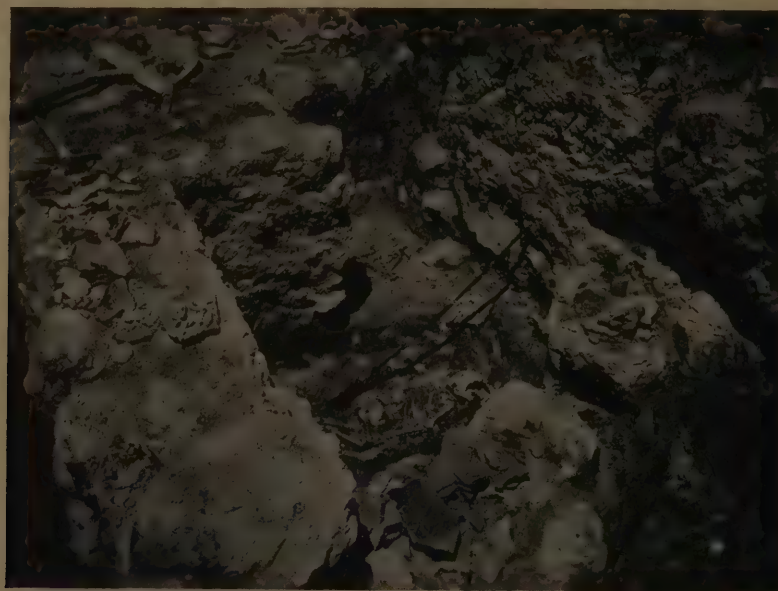


FIGURE 35. TOMB IV

the legs were doubled up in the usual contracted attitude. The left arm and left leg had been disturbed and projected upward at an angle. The head was long in proportion to its width, measuring *ca.* 0.19 m. from front to back and not quite 0.14 m. from side to side. The femur had a length of 0.39 m., the humerus 0.23 m.

Around the neck were found nineteen beads of crystal and fifteen of paste, some of them still adhering together, though the cord which had once joined them into a necklace had naturally rotted away (Fig. 189). Among the crushed bones of the head, resting against the upper jaw, were discovered a small coil of bronze wire and two circlets of the same material, perhaps hair fasteners (Fig. 189). Just beside the skull and partly covered by it lay a small jug of Matt-painted ware (No. 95, Fig. 124); and extending beneath the leg-bones were the shattered fragments of a cup of similar ware (No. 94, Fig. 123). A whorl of terracotta (Fig. 179, No. 1) and a fragmentary bone pin (Fig. 189) lay immediately west of the hands.

TOMB IV. In the eastern part of Trench V, at a depth of *ca.* 1.10 m., the grave of a small child came to light. It was a simple burial in soft earth almost in the angle formed by two walls belonging to an Early Helladic house; this grave pit had been dug down from above

at a later period, and at the point of its greatest depth it barely penetrated the Early Helladic floor. The grave itself had been roughly paved with small stones of irregular sizes, the area thus paved being just large enough to receive the body. The child had been buried in the contracted position (Fig. 35), lying on its left side with the head to the north and facing east, but the torso had evidently been twisted forward under the weight of the superincumbent earth. The right arm lay straight beside the body, the left was bent at the elbow and crossed beneath the waist. The skull was in a crumbly state and could not be accurately measured. The femur measured 0.20 m. in length, the humerus 0.145 m.; the child could hardly have been more than two or three years old. Many fragments of a large



FIGURE 36. TRIAL TRENCHES ON EAST SLOPE OF AMBELAKIA HILL, FROM THE SOUTH

pithos were found at the foot of the skeleton; perhaps they had been used to cover the grave and had somehow slipped down or been thrust aside. Near the feet was found also a sherd of Argive Minyan ware — a fragment from the rim of a bowl. In the earth about the grave many other potsherds occurred, all of Early Helladic fabrics, but the fragment of Argive Minyan found in the grave itself must be taken as fixing the *terminus post quem* for the date of the interment. There were no other objects in the tomb. Hardly more than 0.50 m., south of the grave and at the same level, though extending to a greater depth, was a large mass of animal bones, comprising, apparently, the major part of the skeletons of two goats. Their close juxtaposition certainly suggests that they bore a definite relation to the grave of the child — perhaps they are the remains of animals sacrificed at the time of the burial ceremony.

TOMB V. About 2.25 m. southeast of Tomb IV were found the scanty remains of another child burial. The grave is merely a small circular hole, *ca.* 0.50 m. in diameter, cut through the Early Helladic floor mentioned above. It was covered with several large fragments of a coarse pithos. The bones were those of a very small infant and were too soft and rotten

to be cleared sufficiently for accurate measurement. Even the position of the body could not be determined with absolute certainty; it seemed to lie contracted on its right side with the head toward the east and the face turned to the north. There were no objects in the grave. Its level in relation to the floor indicated that it was later in date than the construction of the Early Helladic house, and it should no doubt be assigned to the Middle Helladic Period.

TOMB VI. In the floor of the court of the House of the Dagger, as already mentioned above (p. 26), was found a shallow oval depression, measuring *ca.* 0.40 m. by 0.70 m. and paved with fine pebbles. It contained a few small crumbling bones of a human skeleton, evidently the remains of an infant burial. The skull was not well enough preserved to be recognizable, and the evidence for the position of the body in the grave was very scanty; such as it was, it implied that the head lay pointing toward the south. No objects were found to make the date of the grave certain, but from its resemblance to other graves of infants it may with probability be attributed to the Middle Helladic Period.

B. THE CEMETERY

After numerous trial trenches had been dug in widening circles about the site, the cemetery of the settlement was finally discovered on the east slope of a hill which rises in the angle southeast of the intersection of the highroad and the line of the Peloponnesian Railway, some 500 m. west of Zygouries itself. This part of the ridge (Fig. 36), which ascends gradually southward toward Mt. Tretus, is now called Ambelakia, though no trace of the one-time vineyards is preserved today. It is a long, bare slope marked by only two or three stunted wild pear trees, and, owing to the scanty depth of poor soil covering its soft *stereo*, is not very productive. The thinness of the layer of earth, however, makes trial trenching very easy, and the graves with their shafts cut into the soft hardpan betray themselves almost immediately beneath the surface of the ground. The situation must have been considered a highly suitable one for a cemetery, since all periods during which Zygouries was occupied are represented here by tombs; indeed in late Roman times, when the prehistoric site had long ceased to be inhabited and a new settlement had been established — perhaps clustering about the “Palaiokastros” above the modern village of Hagios Vasilios — much farther away, the cemetery still continued to be used.

Fifty-three tombs were discovered in the cemetery. Of these three certainly, and a fourth probably, date from the Early Helladic Period; two belong to the Middle Helladic Period; two are Mycenaean chamber tombs of Late Helladic III, and one seems to be a cutting for an unfinished tomb of the same type. Four yielded no evidence whatsoever of date; and the remaining forty must apparently be assigned to late Roman times. To this summary should be added Tomb XVIII, discovered in a railway cutting some distance to the north of Ambelakia, which contained two Geometric vases.¹

In the following description the tombs will be considered in their chronological order.

¹ Sieves were constantly employed during the excavations in the cemetery, and no earth from a grave was thrown away until it had passed a careful scrutiny. The experienced diggers who were entrusted with the clearing of the tombs were, however, so keenly attentive that almost no objects reached the sieves.

EARLY HELLADIC PERIOD

TOMB VII. Tomb VII was perhaps disturbed and, at any rate, rendered more complex for the excavator by the fact that in some later period a second grave was constructed directly over the first. Fortunately, however, the second grave was a comparatively shallow pit, which did not quite reach the floor level of the first; and the general arrangement of this latter is therefore clear enough in the main.

The upper grave was very simple, consisting of a pit 1.25 m. long from north to south by 0.40 m. wide, cut in earth to a depth of *ca.* 0.50 m., and covered by a single large roughly worked rectangular slab of *poros*. The slab, which was cracked diagonally into two pieces, was 1.40 m. long by .085 m. wide and had a thickness of *ca.* 0.20 m. It ran almost due north and south, lying some 0.40 m. below the surface of the ground. The side of the pit was reinforced by small stones at the north and south ends of the grave and for a short distance on



FIGURE 37. SKELETON IN UPPER LAYER OF TOMB VII

the east; elsewhere it was formed of earth, none too firm. On the west side a long piece of *poros* at the top edge of the pit provided a bearing for the cover slab.

The grave contained a fairly well-preserved skeleton (Fig. 37), which lay in a contracted position with the head to the south in the extreme southeast corner of the pit. The head rested on its right side with its face toward the east; perhaps it had fallen over into this position, for the body lay apparently squarely on its back. The legs were doubled up, the knees reaching almost to the chest; the left arm, bent at the elbow, was laid across the breast, meeting the right arm, which was bent back in the same way. The left hand lay over the right hand and wrist.

The skull from front to back at the level of the eyebrows measured 0.20 m.; from the

point of the chin to the top of the head 0.20 m.; from the back of the neck to the forehead 0.16 m. The left humerus had a length of 0.25 m.; the radius 0.30 m. The right femur was 0.37 m. long; the tibia (not quite complete) 0.32 m.

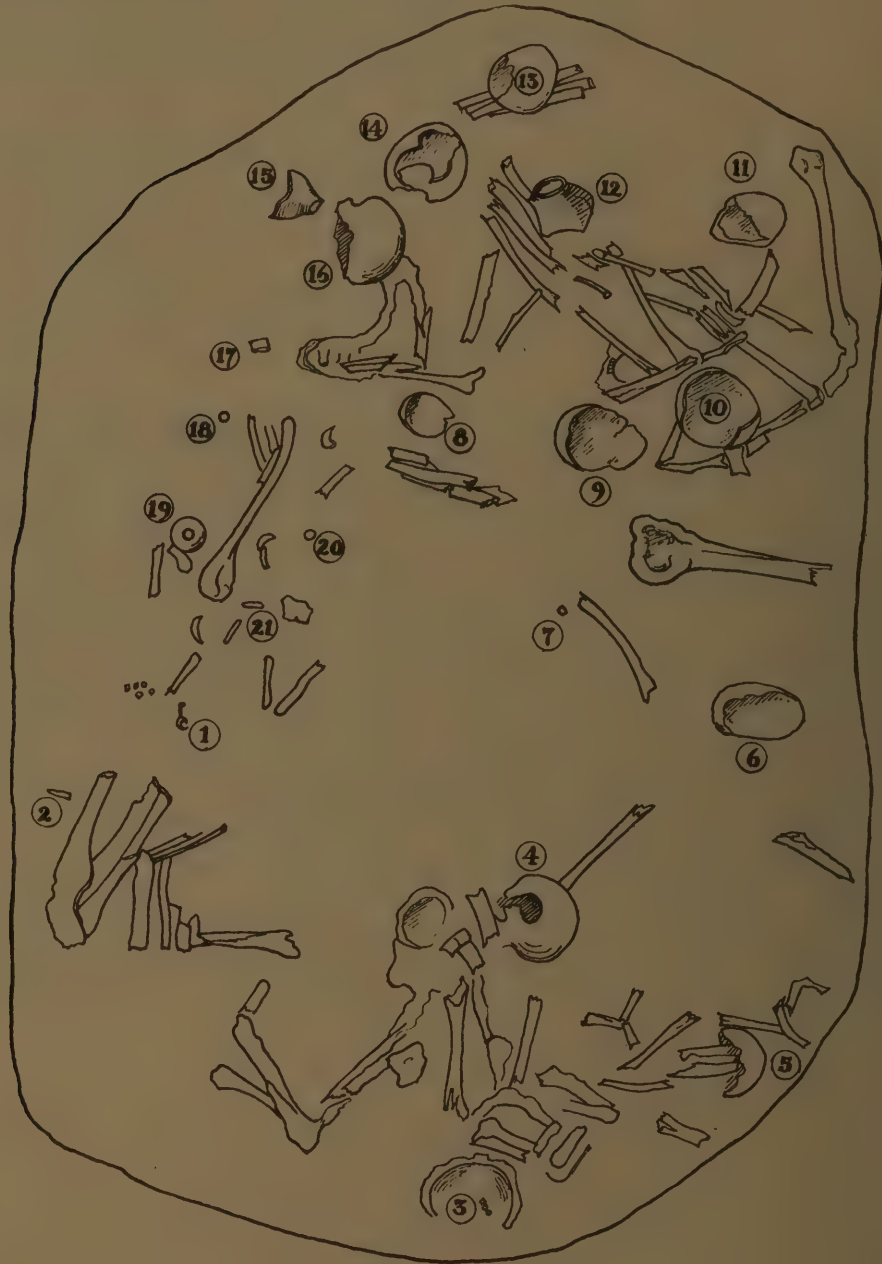


FIGURE 38. PLAN OF TOMB VII

On the little finger (or the next) of the left hand was a ring — a plain thin band of bronze. There were no other objects in the grave. The north end of the pit for a space of 0.35 m. was empty and had apparently not been utilized; the contracted position was not necessitated by lack of space in the tomb.

Evidence to establish with certainty the date of the grave was not forthcoming; the only object found in it, the ring, is indeterminate. The contracted position of the body is that customary in prehistoric graves, especially of the Middle Helladic Period; but the large rectangular cover slab of *poros* is an unusual feature. The possibility of Early Helladic date is not absolutely precluded. However that may be, it is sure at any rate that the tomb belongs to the same series with Nos. IX, X, and XV, to be described below.

The Early Helladic tomb, concerning the date of which there can be no question, lay only some 0.10 m. to 0.20 m. beneath the grave just described. It is a fairly large cavity,



FIGURE 39. NORTH END OF TOMB VII, FROM THE SOUTH

roughly oval in shape, measuring *ca.* 2.60 m. north and south by 1.85 m. east and west, and is cut into soft *stereo* to an average depth of 1.25 m. below the surface of the ground. Whether the opening at the surface was originally of the same size as the area below cannot now be determined. In this spacious grave chamber were found the remains certainly of twelve, possibly of thirteen or fourteen, skeletons. None of them lay in order; the bones were scattered helter skelter, skulls, arm-bones, femurs, vertebrae, all mingled together in utmost confusion (Fig. 38). A certain suggestion of arrangement which appeared in this disorder, in that all the bones were more or less grouped in a zone following the oval side of the grave while the central space was vacant, may have been more apparent than real, since the area at the centre may have been disturbed, and perhaps even cleared of remains, at the time the later interment was made only a few centimetres higher in level. If this latter was indeed Early Helladic, it was certainly the latest in the series of Early Helladic burials.

The bones were in an advanced state of decomposition (Fig. 39), and many of them crumbled when touched. The task of clearing them from the sticky, clayey earth clinging to them was not easy, demanding much patience and care, and it was not often possible to

obtain accurate measurements. Twelve skulls were recognized (the numbers are those of the plan, Figure 38):

1. This was represented only by a jaw bone together with a few teeth in the western part of the grave. It was near this point that a gold ornament, perhaps an earring, came to light.

3. Comparatively well preserved, this lay in the southeast part of the grave, on its left side, facing south, with the top of the crown toward the east. It measured 0.17 m. from front to back and *ca.* 0.133 m. from side to side. Just beside it on the west was apparently a pelvis.

4. A very rotten skull in the extreme southeast angle of the grave was recognizable as such only by the fact that teeth were found about it.

5. This lay against the side wall not far to the northeast of No. 4, almost in an upright position, facing northwest. Most of the forehead had been broken away, and no satisfactory measurements could be taken.

6. A rather badly decayed and incomplete skull lay in the northeast part of the grave, bottom upward. A few small teeth were found about. The skull measured *ca.* 0.18 m. from front to back.

8. Close beside No. 6 to the east was another, much of the right side of which had rotted away. It lay face down, and measured 0.19 m. from front to back.

9. North of the central part of the grave was found a thin decomposed shell of bone, identified by a clearly marked suture as part of a skull. No measurements were possible.

10. Near the northwest corner of the grave, this lay on its left side facing west, with the crown toward the south. From front to back it measured *ca.* 0.16 m.

11. Closely adjoining No. 10 to the north was uncovered another skull, lying also on its left side, facing west; it likewise gave a measurement from front to back of 0.16 m. In the place where the jaws should have been only one tooth was found, and near at hand was a fragment of a thin, rotten substance resembling metal, perhaps silver.

13. This came to light near the middle of the east side of the grave, resting upside down on its crown with the face toward the east. Only the upper half of the skull was preserved; from front to back it measured *ca.* 0.18 m.

14. No. 14, in the northeast part of the grave, lay on its right side facing down and westward with its crown pointing toward the north. Only the upper part of the skull was at all well preserved, but around it and in the earth filling it were many teeth. The measurement from front to back was 0.175 m.

16. At the extreme north of the grave lay the twelfth cranium on its right side facing northwest. The lower part was badly decomposed, but the top of the skull was in fairly good condition, allowing measurements to be taken: front to back, 0.165 m., side to side, *ca.* 0.135 m.

In view of the extremely fragile and rotten condition of the bones it is not unlikely that there were originally more than the twelve skulls listed above. Teeth were scattered about everywhere, and some of the crumbling remains that we took for pelvic bones may well have been the remnants of other crania. The numerous arm-bones and leg-bones were too fragmentary and incomplete for proper measurement. All that can be said is that, so far as appeared, the bones were all those of adults. If children had also been buried in the tomb their remains had entirely vanished or become unrecognizable.

The objects found in Tomb VII, in proportion to the number of persons interred, were very scanty, as may be seen from the following list. The numbers preceding the objects are those by which the latter are marked on the plan; Figure 38.

1. One gold ornament with attached spiral of silver wire (Pl. XX, No. 7).
21. Small thin fragment of silver.
7. One tiny flat silver disk (Fig. 176).
21. One bronze pin, fragmentary.
- 18 and 20. Two cylindrical beads of carnelian (Pl. XX, Nos. 2, 4).
- One cylindrical bead of soft green stone (Pl. XX, No. 6).
17. One small amulet of stone in the shape of a foot (Pl. XX, No. 3).
2. One delicate blade of obsidian (Pl. XX, No. 5).
- One sea shell.

The greater part of four vases: a sauceboat (15), a shallow bowl (12), an unpainted jar (Fig. 95), and a curious diminutive vessel shaped like the bowl of a pipe (Pl. XX, No. 1).

There were also a few potsherds, including several fragments of a small pyxis.



FIGURE 40. TOMB XVI FROM ABOVE

TOMB XVI. Rather more than 20 m. down the slope southeastward from Tomb VII another Early Helladic grave was brought to light. Roughly rectangular at its northern end, and with corners rounded off at the south, it measured *ca.* 1.33 m. in length from north to south and 1.05 m. in width. The floor of the grave was 1.30 m. below the surface of the ground, the shaft being cut in the usual way through soft *stereo*. On this floor were found the remains of three skeletons; as was the case in Tomb VII, they lay not in their proper sequence, but indiscriminately heaped together in a mass occupying somewhat more than the western half of the grave, while the eastern side was bare of remains (Fig. 40). The bones were in a wretched state of preservation, but three skulls were clearly recognizable (Fig. 41). The numbers are those indicated on the plan.

1. One lay in the northwest part of the grave, probably resting on its crown, bottom upward; it was badly decomposed and could not be measured.

2. The second, near the centre of the grave, lay partly on its left side, partly on its crown, with its face turned toward the south. From front to back it gave a measurement of 0.18 m. Beneath the head was found a slender bronze pin (4), broken at one end.

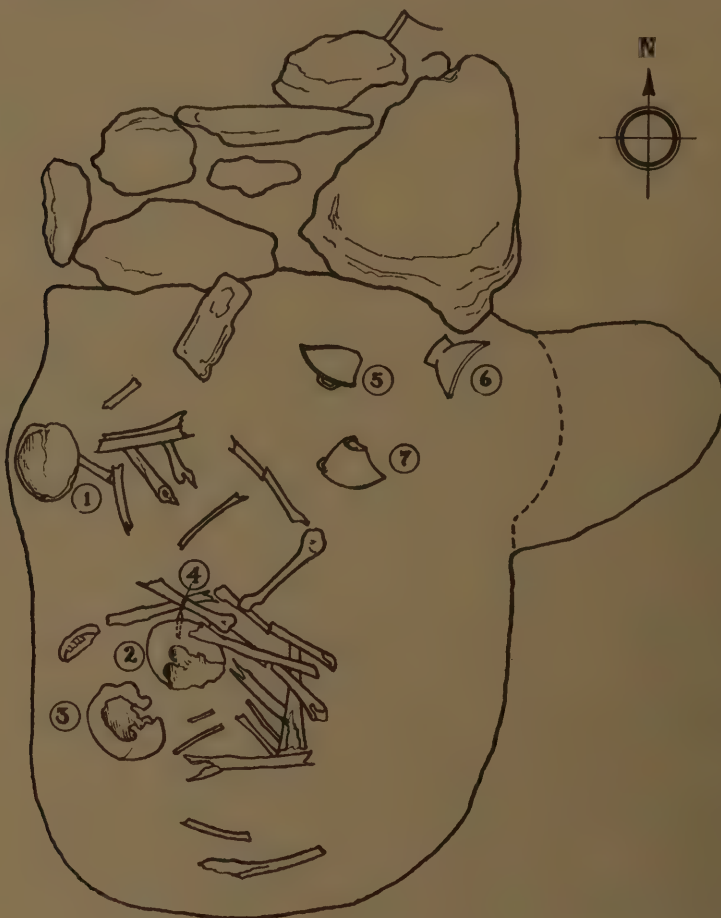


FIGURE 41. PLAN OF TOMB XVI

3. Not far to the southwest of No. 2 a third skull came to light, lying on its left side, facing northwest with its crown pointing southwest. The measurement from front to back was 0.175 m.

In the northeastern part of the grave were found three large potsherds (5, 6, 7), which, together with the bronze pin mentioned above, constitute apparently the whole of the funerary offerings.

TOMB XX. Some 35 m. south and slightly east of Tomb XVI a third grave of the Early Helladic Period was discovered. It is a roughly oval chamber hewn out of soft *stereo*, and measures at its widest points 1.96 m. in length from east to west by 1.78 m. in width. It is a very shallow grave, the floor varying in depth from 0.70 m. to 1.00 m. below the slop-

ing level of the hillside. The opening at the surface is much smaller in area than the floor, the dimensions of which have been given above, since rather more than one-third of the grave on the south side is covered by an overhanging ledge of soft rock or *stereo*. It looks in fact as if a small natural cavity in the hillside had been hollowed out and enlarged in order to be utilized as a tomb (Fig. 42).

In this relatively narrow space were revealed the remains of no fewer than fifteen skeletons, perhaps more, all heaped together in utter confusion, skulls, leg-bones, arm-bones, ribs, vertebrae, lying over, about, and beneath one another as if unceremoniously emptied into a rubbish heap, the same manner of disposition that we have already seen in Tombs VII

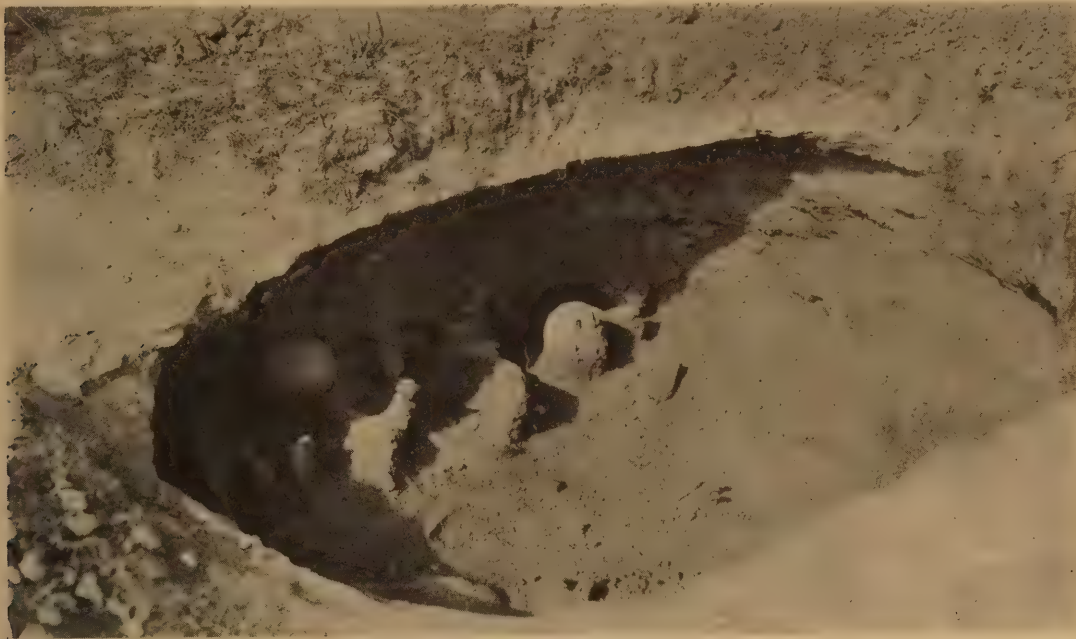


FIGURE 42. TOMB XX, FROM THE EAST

and XVI. In the present instance the great mass of bones lay in the southern half of the chamber, while the northern half was almost empty, save for a large stone which may accidentally have fallen into the grave. The remains were thus chiefly concentrated under the overhanging ledge of rock, and this may well be what had protected them from further disturbance. If the northern half had also once been similarly filled with relics, the lack of the protection afforded by the ledge might perhaps account for their disappearance. Since all these bones were so closely packed and jumbled together, it was by no means easy to clear and disentangle them so that their position could be seen; and to transfer this to paper was an even more difficult undertaking. But Mr. Heurtley's patient efforts were fully equal to the task, as a glance at the accompanying plans will show. In order to represent all of the skulls and larger bones, those that lay at the top of the mass and those beneath, it was necessary to draw the plan in two levels; but it should be borne in mind that there was no stratification in the tomb: the whole mass was a unit, the remains are all of the same period (Fig. 43 a and b).

The bones were generally in a miserable state of decay; usually they lay in a position

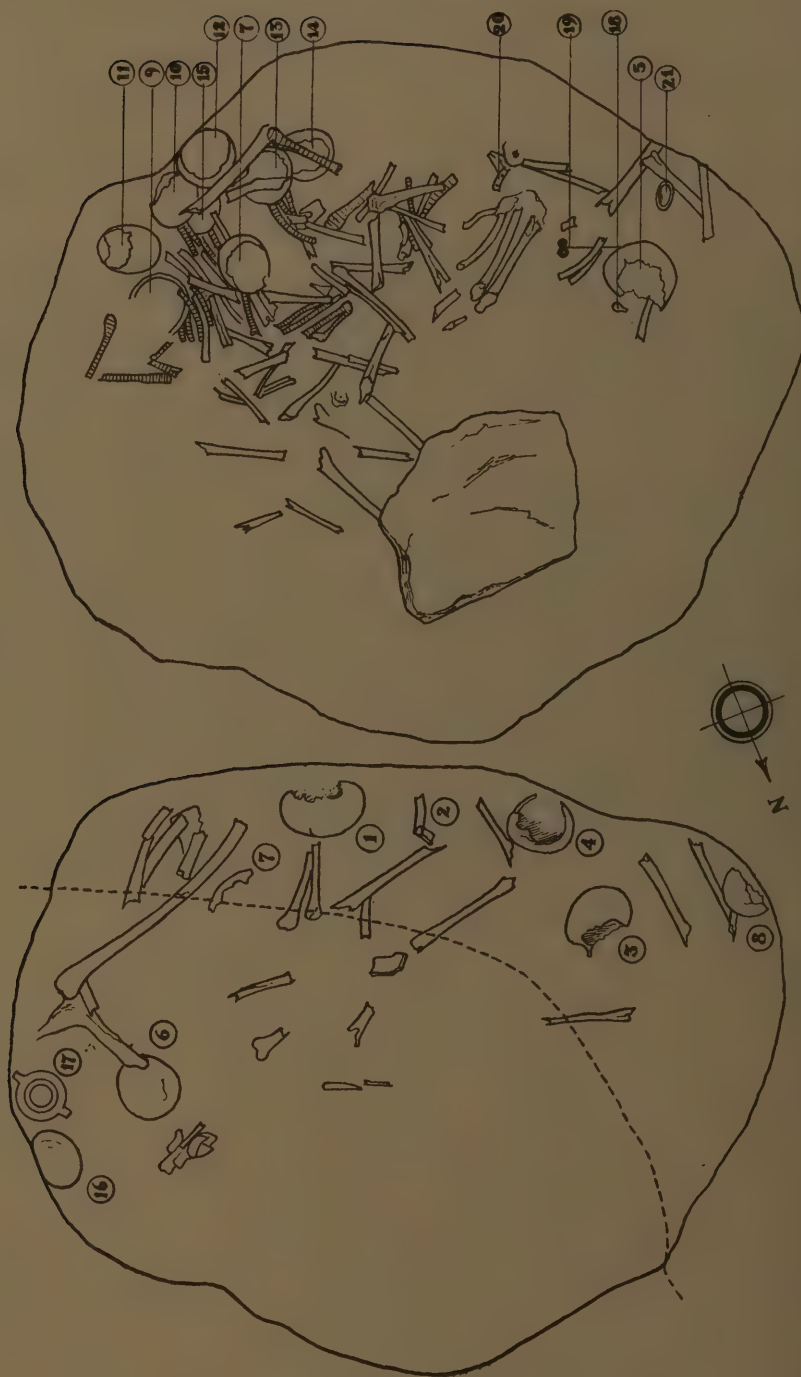


FIGURE 43a. PLAN OF TOMB XX, UPPER LEVEL

FIGURE 43b. PLAN OF TOMB XX, LOWER LEVEL

in which it was extremely awkward to measure them, and they could seldom be moved without damage. It was possible to recognize fifteen skulls, which are recorded below in their order of numbering on the plan.

1. Only the upper part of this skull was preserved. It lay close against the south wall of the grave, on its right side, facing eastward, with its crown to the south and upward. From front to back it measured *ca.* 0.19 m.

2. Immediately adjoining No. 1 on the west was a very crumbly rotten skull, apparently resting on its crown upside down. No measurements were possible.

3. This lay toward the western part of the grave, on its right side, facing eastward. The measurement from front to back was 0.18 m.

4. Only 0.10 m. south of No. 3 was another in very bad condition; it seemed to face directly upward with its crown toward the east.

5. This skull was found almost exactly underneath No. 3, and is therefore shown on the plan of the lower level. It lay on its left side, facing northwest, and measured 0.165 m. from front to back. Over the right side of the forehead was found a small fragment of a thin fragile sheet of silver, possibly the remnant of a diadem, resembling the Cycladic examples discovered by Tsountas (*infra* p. 181). Just beneath the jaws, of which almost nothing but a few teeth survived, a small cylindrical bead of carnelian came to light. A gold ornament, probably an earring, was found beneath the skull (No. 18 on the plan), and projecting from below on the east side was a long silver pin with a double spiraliform head (No. 19 on the plan). A diminutive patera of Early Helladic ware was uncovered a short distance south of the skull (No. 21 on the plan), and a little farther away a spatula of bronze appeared (No. 20 on the plan).

6. Skull No. 6, near the east end of the grave, stood almost upright, looking toward the west, though most of the face had disappeared. From front to back it measured 0.17 m.; from side to side, *ca.* 0.14 m. Beneath it was found a small flat piece of silver similar to that mentioned above.

7. No. 7, in the southeast part of the grave, was turned bottom up, resting on its crown with the face toward the northwest; it had a length of 0.17 m.

8. This lay at the extreme southwest side of the tomb in such wretched state that the exact position could not be determined.

9. Skull No. 9, near the east edge of the grave, not far from No. 7, was also in ruinous condition; it seemed to be lying on its right side, facing east, but was not complete enough to be measured.

10. This skull lay close against the southeast side of the tomb; it was not well enough preserved to allow its position to be made out with certainty.

11. Next to No. 10 on the northeast was a very thick skull, facing upward with its crown toward the southwest. Its measurement from front to back was 0.16 m., from side to side *ca.* 0.12 m.

12. Adjacent to No. 10 on the southwest, and leaning against the wall of the tomb, was another fragile rotten skull in an unrecognizable position.

13 and 14. Skull No. 13, immediately west of No. 12, was very fragmentary; on its west side it partly overlapped No. 14, which was in an equally incomplete state.

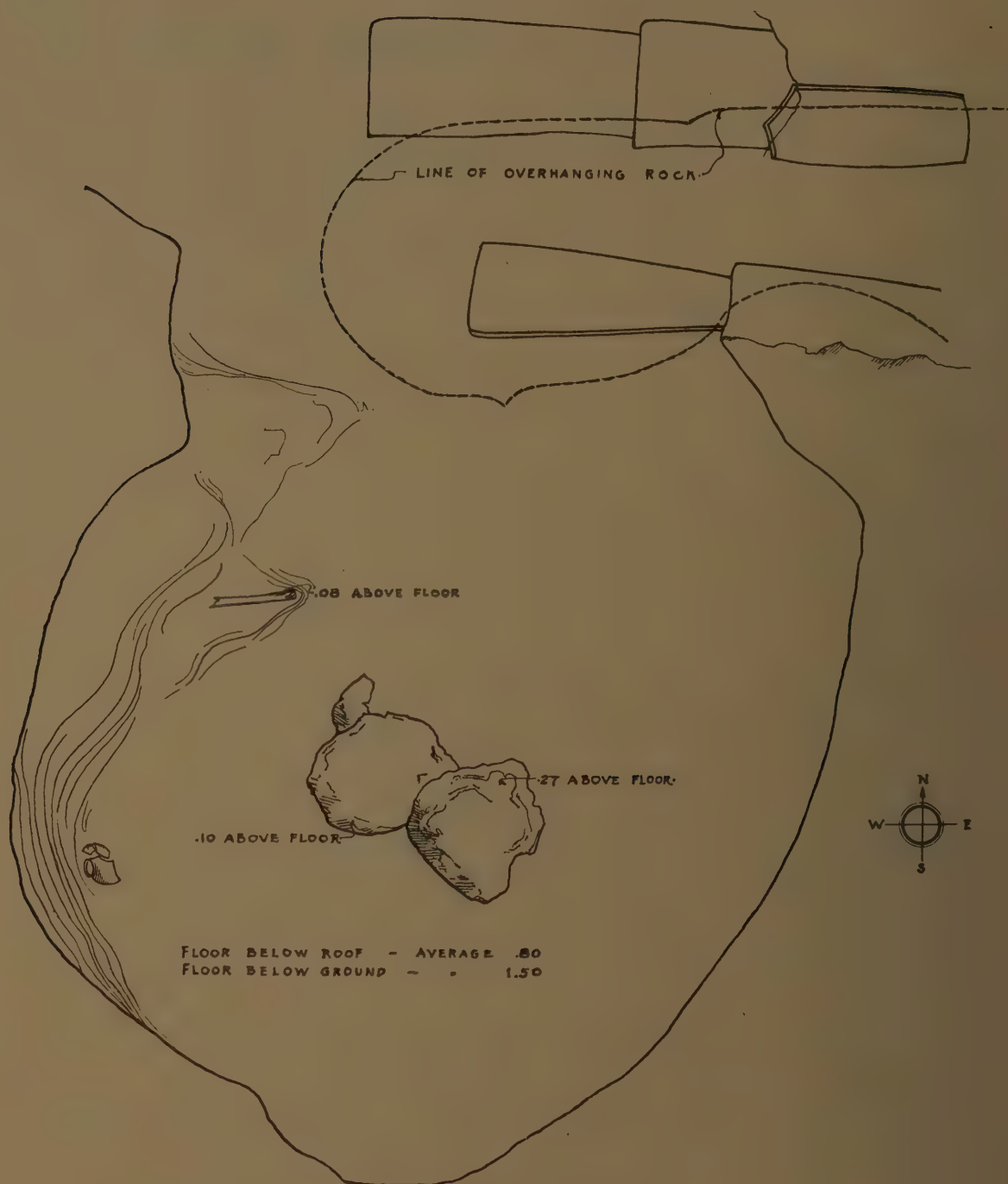


FIGURE 44. PLAN OF TOMB XXIII

15. Almost underneath No. 10 in the southeast corner of the chamber, was a portion of a rather small skull, barely recognizable as such.

The bones of arms and legs were so badly broken and incomplete that no accurate measurements were possible; all that were preserved, however, seemed to be those of adults.

In the northern half of the grave at the east end, where there were practically no bones, two crude intact vases of typically Early Helladic fabric were found (Nos. 16 and 17 on the plan). The full list of the objects recovered from Tomb XX is as follows:

One gold ornament, probably an earring (Pl. XX, No. 11).

Two fragments of thin silver, perhaps from a diadem.

One silver pin (Pl. XX, No. 9).

One small spatula of bronze (Pl. XX, No. 10).

One bronze pin (Pl. XX, No. 8).

One cylindrical bead of carnelian (Pl. XX, No. 12).

One bead of steatite (Pl. XX, No. 13).

One whorl or button of bone (Fig. 181, No. 3).

Three vases of unpainted ware (Fig. 96), a crudely made jar, a shallow bowl, and a small patera. There were also a few potsherds, all of Early Helladic date.

TOMB XXIII. About 6 m. directly south of Tomb XX an irregular cutting in *stereo* was observed and investigated. It had a width of *ca.* 0.80 m. from north to south and a length of 1.50 m., and its bottom or floor was reached at a depth of 1.50 m. below the surface of the ground. On each long side was found a pair of tiles standing on edge on the floor and leaning against the vertical scarp, sheltering a narrow grave hollowed out at the base of the side walls — the arrangement familiar from so many other Roman tile-graves in the cemetery (see p. 70). But the presence of a good many Early Helladic sherds in the earth filling the shaft led to further investigation which resulted in the discovery that at the west end of the shaft, just beyond the end of the southern tile-grave, an opening led southward into a small natural cave under an overhanging ledge of conglomerate. This opening had apparently once been closed by a rough wall of stones, chiefly fragments of *poros*, some of which had fallen away or been removed, perhaps at the time of the Roman burial.

The cave (Fig. 44) was approximately circular, possibly having been enlarged or rounded off by human agency; it had a diameter of *ca.* 2.50 m. from north to south, and some 0.10 m. less from east to west; and a height from floor to roof of *ca.* 0.70 m. Most of this space was filled with earth which, when removed, produced not a few Early Helladic potsherds. In the western part of the chamber, near the entrance, a considerable portion of one large bone, probably a femur, was found, together with a few decayed fragments of smaller bones. Toward the inner end of the chamber, against its west wall, a large piece of a coarse pot came to light. These were the only objects in the chamber except for two flat stones near the centre. Just outside the entrance, among the Early Helladic potsherds in the shaft, a fragment of a curious flat ornament of bronze was recovered.

Although the objects obtained from Tomb XXIII are sadly meagre and the evidence at best unsatisfactory, it is probably safe to recognize here an Early Helladic grave which was disturbed and emptied in the period of the late Roman burials in the shaft. Robbery could hardly have been the motive in view of the extreme poverty of these Early Helladic tombs; more probably the object was merely to prepare the shaft for the tile-graves. Indeed it

may not be too bold to see in No. XXIII, though empty, the best representative of this peculiar type of Early Helladic tomb, three complete examples of which (Nos. VII, XVI, and XX) have been described on the foregoing pages. Strictly speaking they are ossuaries, not graves. And these rude cave-ossuaries, exemplified especially by No. XXIII, but also by No. XX, may well be the survivors of a very simple primitive form of sepulture, a small natural hollow, protected by an overhanging ledge of rock, being utilized as a place of burial in which the dead could be deposited from time to time until the space was filled. Such tombs as VII and XVI might, then, represent a later development when, no more natural cavities being available, a purely artificial hollow in the ground had to be dug to contain the bones which tradition perhaps still demanded should be preserved in an ossuary.¹

So far as I know, these ossuaries are the first of their kind to come to light on the mainland of Greece. Indeed, except for a single tomb, excavated at Corinth in 1896 (Heermance and Lord, *American Journal of Archaeology*, I, 1897, pp. 313 ff.), Early Helladic burials have until the present time remained an unknown quantity. The Corinthian grave, with its two chambers opening laterally from the bottom of a well-cut rectangular shaft, is quite different from the type now exemplified at Zygouries, which seems to belong to a far more primitive stage. The nearest analogy to the Corinthian type is to be found in the single-chambered tombs discovered by the late Dr. Papabasileiou near Chalcis in Euboea (Παπαβασιλείου: *Περὶ τῶν ἐν Εὐβοίᾳ Ἀρχαίων Τάφων*, pp. 1 ff.); but for the bone-filled ledge-caves of Ambelakia no good analogies seem available in the Aegean sphere, except possibly in Crete (p. 214).

It is barely possible that the numerous rectangular shafts found everywhere about the hill were made originally for Early Helladic graves, not radically different from the contemporary cist graves in the Cyclades; and that they were thoroughly cleaned out in Roman times in order to be used again for burials protected by leaning tiles. One might indeed wonder if it was not at this period that the bones were collected and deposited in the ossuaries in the disordered heaps in which we found them. Several considerations, however, make this theory improbable in the extreme. In the first place, the bones themselves after some 2500 years in the tombs would have required careful excavation to be removed even in the condition in which we found them; the skeletons in the Roman graves, after less than 1600 years under the same conditions, have almost totally disappeared. The preservation of the remains in the ossuaries must be due mainly to the protection supplied by the overhanging ledge. In the second place, if the bones had been transferred in Roman times, all objects of gold, silver, and bronze would surely have been appropriated, even the smallest, and none would have been deposited in the ossuaries. And, finally, there are the three intact vases from Tomb XX, and the four almost complete from VII, which it is utterly unlikely that grave-diggers of the fourth century A.D. would have respected and moved along with the bones. The ossuaries must therefore be regarded as purely Early Helladic phenomena.²

The extreme poverty of these burials, as appears from the meagre list of objects found,

¹ In view of the extremely soft nature of the *stereo* on the hill of Ambelakia, it is not impossible that both VII and XVI were originally partially covered by ledges which have since crumbled away.

² The excavations at the Argive Heraeum in 1925 brought to light the scanty remains of a similar Early Helladic ossuary.

was disappointing; it is to be hoped that future excavations will some day reveal much richer graves of the period. The presence of gold, the most noteworthy feature, in these tombs, which are doubtless those of persons of humble standing, gives some intimation of what we may expect when the grave of a chieftain is found.

MIDDLE HELLADIC PERIOD

TOMB XXII. About 5 m. directly west of Tomb XX a grave of a different type was discovered. It appears to have been a simple interment in soft earth with no built sides and no cutting in *stereo*. The shape and size of the pit or cist could therefore not be determined, but the area occupied by the remains measured approximately 1 m. in width from north

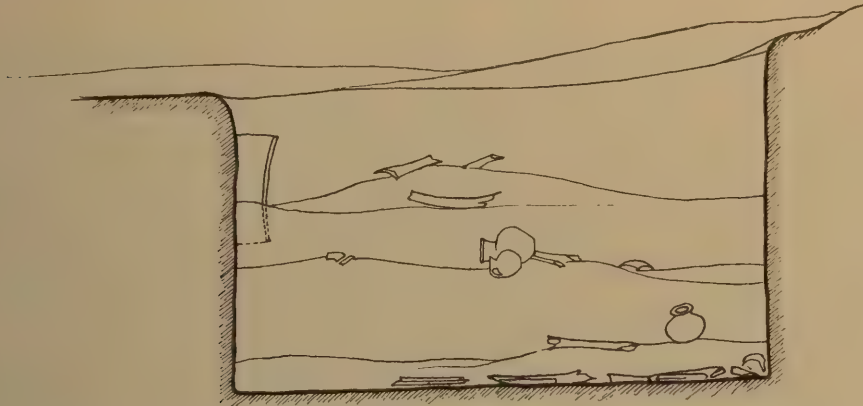


FIGURE 45. SECTION THROUGH TOMB XXII, LOOKING SOUTH

to south by 1.50 m. in length from east to west, and the depth from the surface of the ground to *stereo*, on which the lowest interment rested, was *ca.* 1 m.

In this grave three layers of remains could be clearly distinguished, as appears in the section (Fig. 45). The uppermost was found at a depth of 0.40 m. to 0.50 m. below ground, or at 0.60 m. to 0.50 m. above *stereo*; the second at 0.50 m. to 0.25 m. above *stereo*, and the lowest or earliest from 0.20 m. above *stereo* to *stereo* itself.

The uppermost layer contained only a few bones — one recognizable as part of a femur — but no perfectly certain traces of a skull. There were no other objects here.

The middle layer (Fig. 46 a) included two fairly large, but incomplete, leg-bones, two clusters of thin decayed fragments, probably skulls, a number of smaller bits of bone, and two jugs of Matt-painted ware. The position of the body or bodies could not be made out.

The bottom layer (Fig. 46 b), lying on *stereo*, yielded remains which, although in an extremely wretched state of preservation, nevertheless gave sufficient evidence for the arrangement of the grave. Two bodies had been buried here, side by side, facing each other, each with its head toward the west. Both were in a more or less contracted position, with the femurs bent approximately at right angles to the body and with the lower legs also bent back so that the feet reached almost to the line of the body. In each case only one arm was preserved; it was bent sharply at the elbow so that the hand lay before the face. The southern skeleton was much the larger: the femurs, though not completely preserved, had

a length of 0.35 m.; a tibia, just over 0.30 m.; and the humerus, 0.30 m. The skull was badly crushed, but most of the teeth were preserved. This skeleton lay on its left side, facing north. Just above the right shoulder was a small cup with a basket handle, a good example of Mattpainted ware.

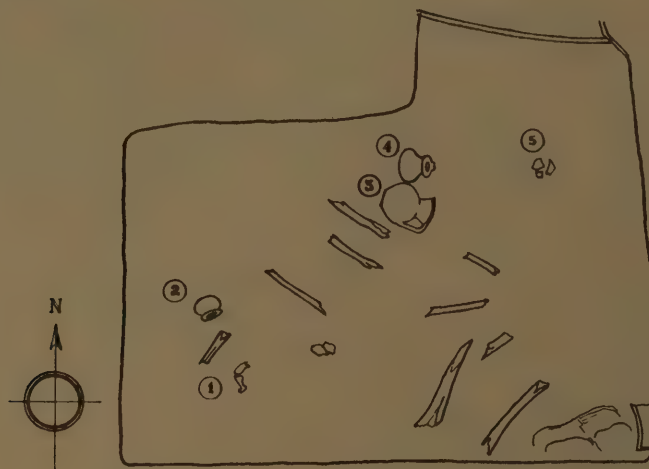


FIGURE 46a. PLAN OF TOMB XXII, MIDDLE LAYER

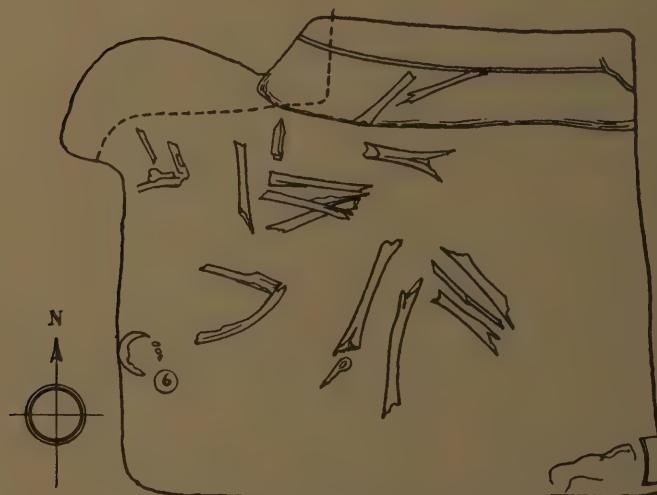


FIGURE 46b. PLAN OF TOMB XXII, LOWEST LAYER

The northern skeleton was small and its bones in a very crumbly state. The femurs were incomplete, the longer fragment measuring only 0.18 m.; a fibula had a length of 0.27 m.; while the bones of the arm were too fragmentary for a satisfactory measurement. Only the scantiest traces of the skull could be observed. This body had been laid on its right side, facing south.

It is evident that an adult and a child had been buried together in the grave, and almost surely at the same time. Other instances of a double burial in one tomb have been observed elsewhere; reference may be made to Grave No. VII at Gonia (not yet published). In the latter case, however, the two skeletons, male and female, were of adults, and each lay on its

left side. The position in the grave at Ambelakia, where the two bodies were placed facing each other, is interesting to note.

LATE HELLADIC PERIOD

TOMB XXXIII. Less than 30 m. northeast of Tomb XX and somewhat lower down the slope of the hill, a Mycenaean chamber tomb of the Third Late Helladic Period was discovered (Plan, Fig. 48). The *dromos* (Fig. 49), running approximately east and west, and cut in soft *stereo*, has a length of 6.55 m.; at its east end it is 0.87 m. wide, increasing toward the west to 1.01 m. at the door. The sides of the *dromos* taper slightly; above the door, at a height of 2.35 m. from the floor, the opening is 0.73 m. wide, and the tapering thus amounts to 0.14 m. on each side. The floor of the *dromos* slopes downward.

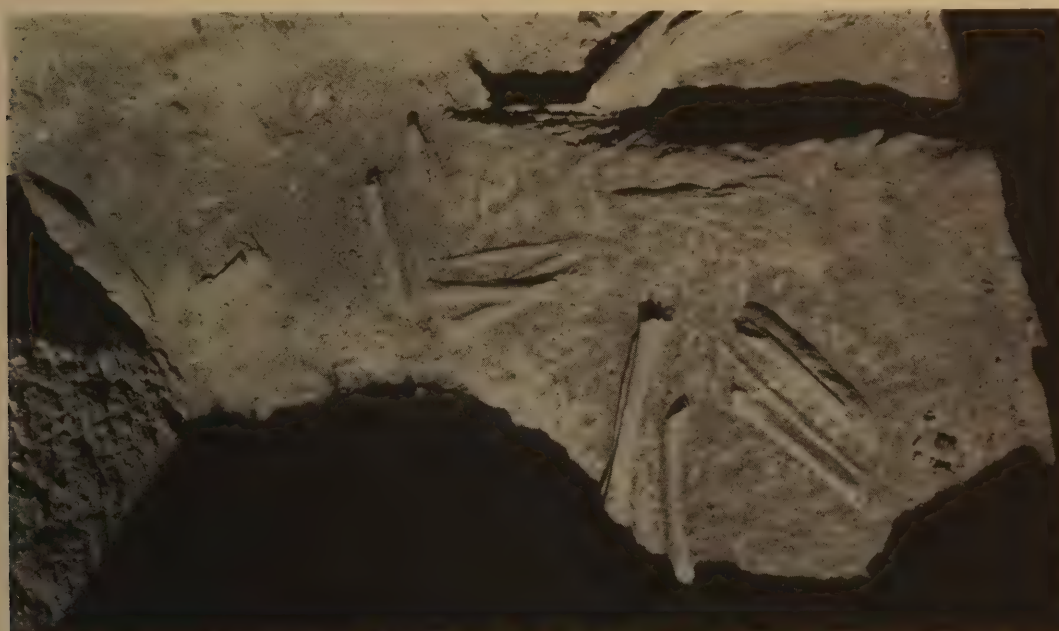


FIGURE 47. BONES IN LOWEST LAYER OF TOMB XXII, FROM ABOVE

The doorway, slightly rounded at the top, is 1.14 m. high; it also tapers from bottom to top, having a width on the floor of 0.64 m., and at the lintel 0.48 m. The inner end wall of the *dromos*, through which this opening passes, is vertical; the doorway is centred in it, with a plain band, or "jamb" *ca.* 0.19 m. wide on either side. The entrance has a depth of 1.20 m.; its axis varies from that of the *dromos*, making an angle of 7° toward the south, and agreeing with the orientation of the chamber.

The doorway was closed by a well-built wall, for the most part made of flat stones of *poros*. This wall was constructed in two distinct sections, the dividing line of which may be seen running down the middle of the doorway (Fig. 50). The right hand (northern) section, carefully laid with fairly regular stones, was evidently built first and the southern section then filled in with rougher material. The wall continued inward beyond these facing-stones, being very thick and substantial; it had clearly never been opened since it was built.

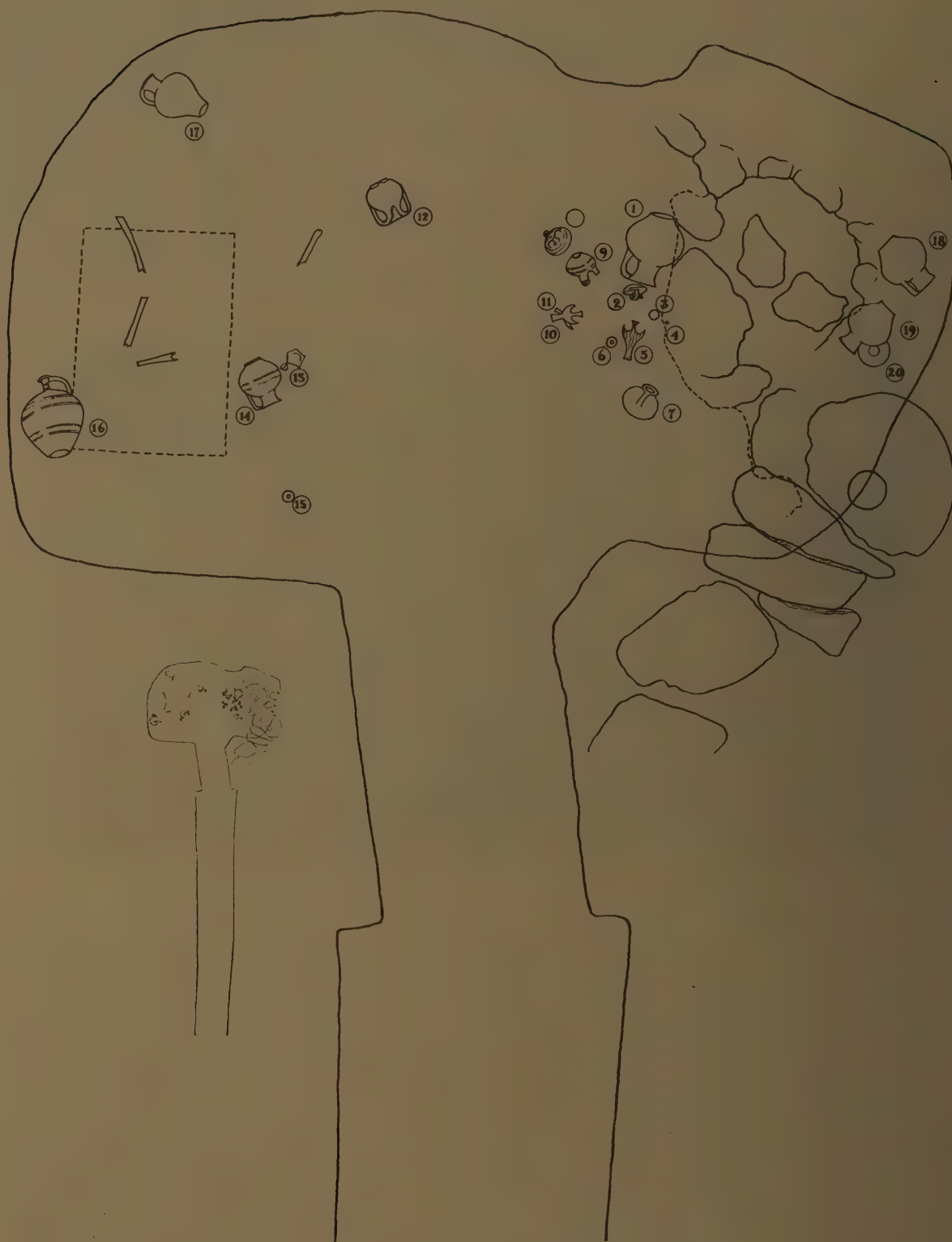


FIGURE 48. PLAN OF TOMB XXXIII

The chamber of the tomb, hewn in *stereo*, had collapsed, and it was necessary to excavate it by means of a pit opened from above. When cleared, it proved to be roughly rectangular in shape, though the corners were rounded off and the sides were not quite straight, nor quite parallel. From north to south the greatest dimension was 3.39 m., from east to west 2.07 m.



FIGURE 49. DROMOS OF TOMB XXXIII



FIGURE 50. DOOR OF TOMB XXXIII

In the northeast corner of the chamber was found a rudely constructed cist-grave, built of irregular unworked stones and fragments of Greek tiles, with a number of narrow flat slabs of *poros* and a fragment of a huge pithos as a cover. The bottom of this grave was *ca.* 1 m. above the floor of the tomb, but many stones from it had apparently fallen down into the chamber where they rested, some as low as *ca.* 0.50 m. above the floor. The exact or even approximate date of this later cist-grave could not be determined, as no objects were found in it, and indeed only the scantiest traces of decayed bones were discernible. At any rate, it is clear that the grave dates from before the collapse of the chamber, having been dug from above, for fallen stones from the grave lay just above the floor on a thick layer of hard *stereo*, which had certainly originally formed part of the roof of the chamber.

As a result of the collapse of the roof, many of the objects in the tomb had been crushed

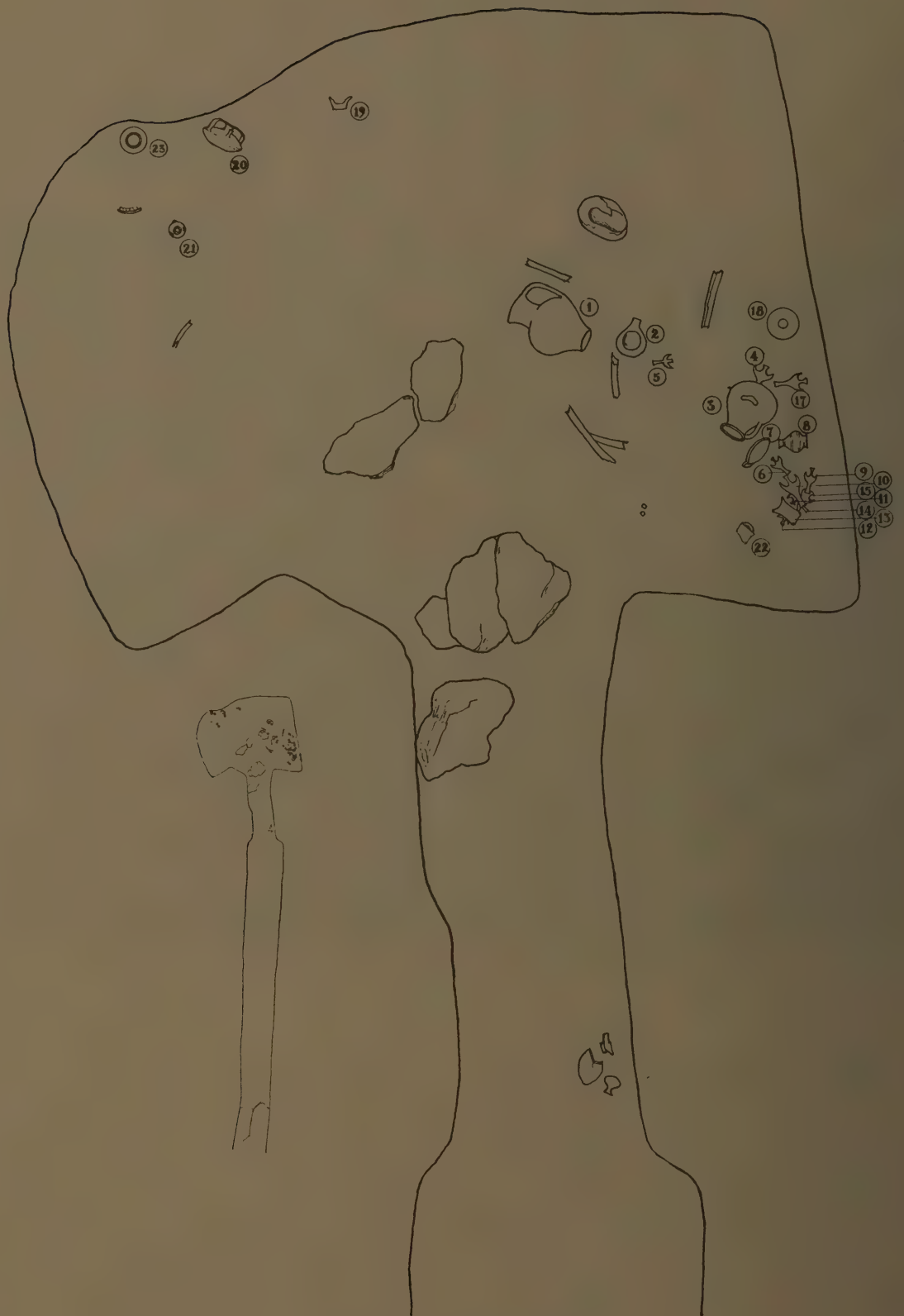


FIGURE 51. PLAN OF TOMB XXXV

and broken. The bones had almost completely disappeared, and the few fragments that survived were so fragile that they could hardly be touched. The scanty nature of the evidence in this respect did not permit the determination of the position of the body, nor was it possible to determine how many persons were buried in the tomb, if more than one.

In the southern part of the chamber a soft spot appeared in the floor; investigation here revealed a depression, roughly rectangular in shape, measuring *ca.* 0.80 m. from east to west by 0.55 m. from north to south, and *ca.* 0.25 m. in depth. It resembled a small cist, but contained nothing more than two potsherds.

The following objects were found in the tomb, the number in each case being that by which the object is indicated on the plan (Fig. 48):

1. Large unpainted jug (No. 355, Fig. 165).
2. Squat stirrup vase (No. 356, Fig. 161).
3. Lentoid seal of steatite (Fig. 197).
4. Bead of steatite (Fig. 197).
5. Figurine of terracotta (No. 358, Fig. 192).
6. Whorl or button of steatite (Fig. 197).
7. Small jug (No. 353, Fig. 163).
8. Small stirrup vase (No. 357, Fig. 161).
9. Pot with basket handle (No. 351, Fig. 162).
10. Figurine of terracotta (No. 359, Fig. 192).
11. Figurine of terracotta (No. 360, Fig. 192).
12. Unpainted jug with two handles (No. 349, Fig. 166).
13. Whorl or button of steatite (Fig. 197).
14. Small jug with one handle (No. 354, Fig. 163).
15. Whorl or button of steatite (Fig. 197).
16. Tall painted jug (No. 350, Fig. 166).
17. Broad unpainted jug (No. 348, Fig. 165).
18. Low jug with one handle (No. 352, Fig. 164).
19. Jug similar to No. 18 (No. 361, Fig. 164).
20. Small stirrup vase (No. 362, Fig. 162).

TOMB XXXV. Five metres directly north of No. XXXIII the same trial trench revealed a second Mycenaean chamber tomb, like the first cut in soft *stereo* or hardpan (Plan, Fig. 51). The *dromos* (Fig. 52) had a length of 8 m. from east to west, descending *ca.* 1.05 m. in this distance. It is 0.85 m. wide at its outer end and broadens to 1.05 m. on *stereo* at the door, where the floor is 2.90 m. below the surface of the ground. The sides of the *dromos* taper more sharply than was the case in Tomb XXXIII, and the opening above the inner end is very narrow, though the sides do not actually meet in a sharp point. The sides of the *dromos* are rather carefully and smoothly cut, but do not form a right angle when they meet the end wall, as the corners are rounded off. The end wall is less carefully worked than the side walls.

In the middle of the northern side wall, at a height of *ca.* 1.10 m. above the floor, a small slab of *poros*, 0.26 m. high by 0.38 m. long, covered the opening into a recess or cavity which ran back 0.35 m. into *stereo*. It contained soft loose earth in which no objects were found. Similar recesses have been observed in the *dromoi* of Mycenaean tombs elsewhere and seem to have been used as cists to contain bones removed from the chamber, or indeed for primary

burials. In the present instance the cavity may have been prepared for such a purpose, but seems never to have been utilized.

Along the sides of the *dromos* two graves came to light, one on the north and one on the south, each a simple shaft of a type common in this cemetery. Apart from a little dark and

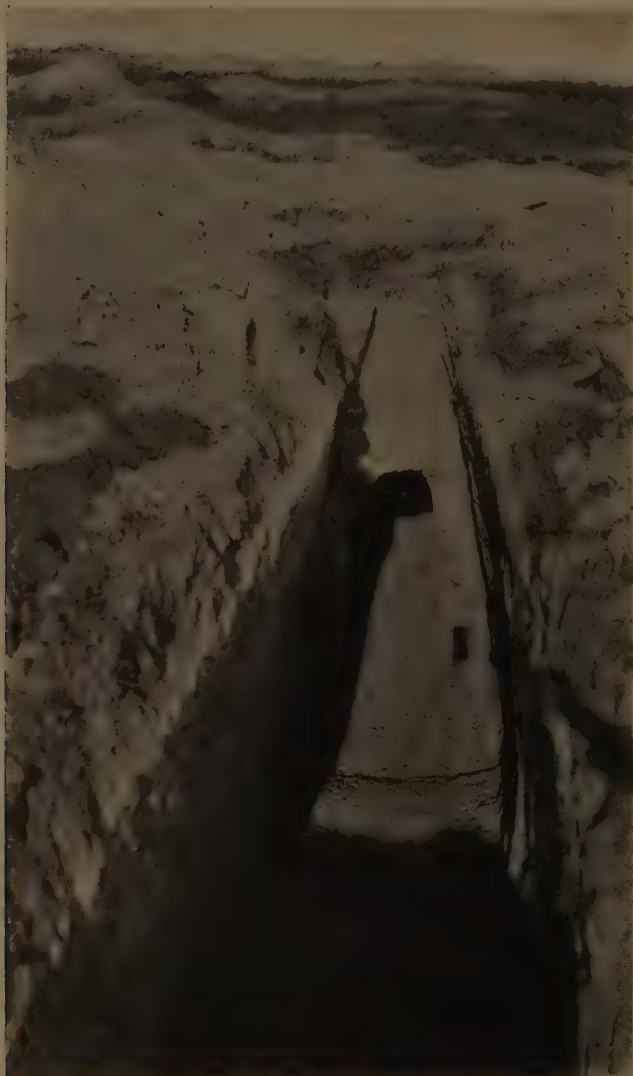


FIGURE 52. DROMOS OF TOMB XXXV

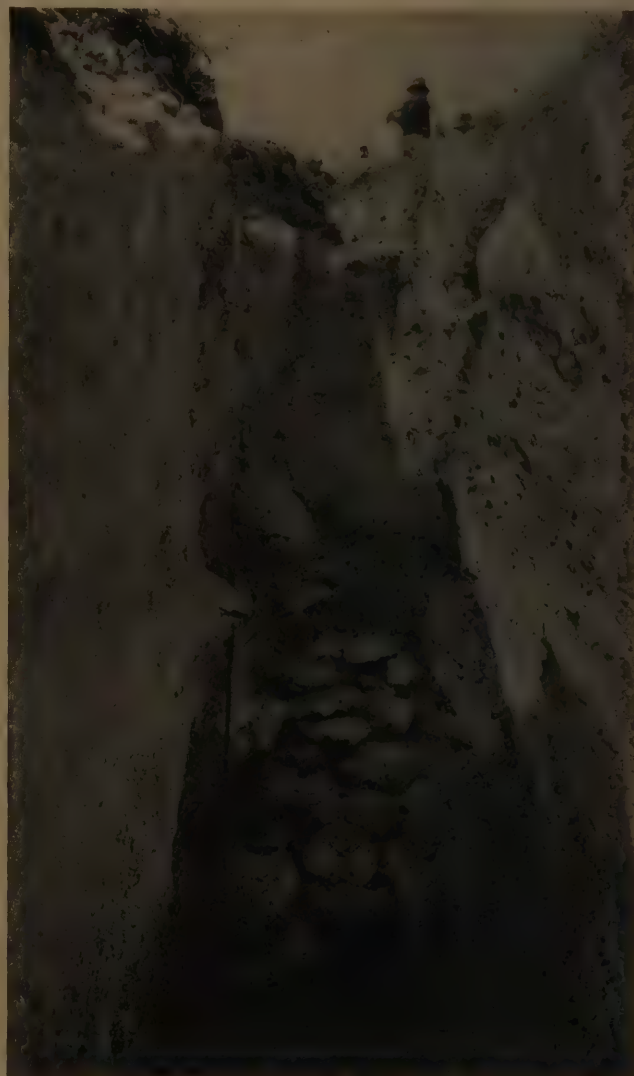


FIGURE 53. DOOR OF TOMB XXXV

mouldy earth no remains whatsoever were found in them, and the evidence was unfortunately not decisive as to whether or not these shafts antedated the cutting of the *dromos*. They were probably earlier in construction, though they seem to have been cleared out and used again in Roman times.

On the floor of the *dromos*, just outside the door, lay a few fragments of at least two unpainted cylixes like those of type *c* from the potter's shop (p. 153).

The doorway was not so well cut as that in Tomb XXXIII. Irregularly triangular in

shape, from a width of *ca.* 0.80 m. at the floor it came almost to a point at 1.60 m. above *stereo*. Hardpan at this point was rather soft and when the doorway was cleared, it was found that a heavy block of *poros*, 0.35 m. thick, had been set in as additional support, forming a sort of lintel. The doorway was unusually deep in proportion to the size of the tomb, measuring no less than 1.71 m. from the *dromos* to the chamber. The door was walled up with unshaped stones of *poros* of no great size (Fig. 53) and the wall was not so thick as that blocking the entrance of Tomb XXXIII. But a number of fairly large stones, lying in the passage inside and extending into the chamber, may perhaps have fallen from the inner face of the wall.



FIGURE 54. BONES AND VASES UNCOVERED IN CHAMBER, TOMB XXXV

Just inside the door-wall on the north side of the entrance passage, at a height of 1.05 m. above the floor, were found three vases, one complete and the others fragmentary: a large jug, a small jug, and a cup. They seem to be of Roman date and are no doubt funeral offerings from a late grave which had perhaps been carried down to this curious place of finding at the time of the collapse of Tomb XXXV. A Roman tile-grave did in fact lie directly above the chamber of the Mycenaean tomb, as we discovered when we were obliged to sink a large pit from the surface of the ground in order to clear out the fallen debris from the chamber. Only the tiles were found in place; there was no trace of bones or other objects. One may therefore with very fair probability assign the three Roman pots from the entrance passage of our tomb to this tile-grave above the chamber. Some bones, presumably from this same grave, appeared among the chunks of fallen *stereo* in the chamber.

The chamber was approximately rectangular, though the two south corners were rounded and there was a curious bulge near the south end of both the east and west walls. The dimensions of the chamber were *ca.* 2.82 m. from north to south by 2.20 m. from east

to west. The entrance is not symmetrically placed, but lies slightly north of the axis of the room.

The chamber, as already mentioned, was filled with earth and débris which had fallen from above, and a certain stratification was visible in this fill. From the level of the floor, cut in hardpan, to a height of *ca.* 0.75 m. was a layer of fairly loose brownish soil; above this lay a stratum, some 0.80 m. thick, of hard whitish clay, obviously the dissolved material of the roof of the chamber. The bones and all the objects in the tomb were found lying on and just beneath the top of the layer of brownish soil, well above the floor of the chamber; no remains came to light on or near the floor itself. This seems a rather peculiar phenomenon, for which no satisfactory explanation appeared. Apparently the tomb was not used immediately upon its completion, but some time must have elapsed sufficient to permit the accumulation of the layer of brown soil.

As in Tomb XXXIII, bones were extremely scanty, but not quite in the same state of utter dissolution. In the north part of the chamber one skull came to light, and *ca.* 0.50 m. east of it three fragments of large bones, no doubt from the legs. Nearer to the skull were two smaller bones, one to the south and the other to the north, perhaps from the arms; and this meagre evidence suggests that a body had been placed in this northern part of the chamber, lying on its back with the head to the west, the feet toward the east, and the arms at the sides. The skull, only the upper part of which was preserved, measured 0.18 m. from front to back. In the southwestern part of the chamber, *ca.* 1.60 m. distant from the skull, a portion of a set of teeth was uncovered; about it and 0.40 m. farther east were a few badly decomposed fragments of bone. It is likely that these remains are those of a second skeleton, but any suggestion as to the position in which it lay would be pure speculation. A bull's head of terracotta, two small stirrup vases, and a squat bowl were found in this part of the chamber; all the other objects were from the north end of the tomb (Fig. 54).

The following list comprises all the objects recovered, each one being given under the number by which it is indicated on the plan (Fig. 51):

1. Large unpainted jug (No. 326, Fig. 170).
2. Small vase with side spout (No. 347, Fig. 167).
3. Jug with three handles (No. 327, Fig. 170).
4. Figurine of terracotta (No. 335, Fig. 193).
5. Figurine of terracotta (No. 336, Fig. 193).
6. Figurine of terracotta (No. 337, Fig. 193).
7. Small askos (No. 328, Fig. 169).
8. Small jar with three handles (No. 329, Fig. 168).
9. Figurine of terracotta (No. 338, Fig. 193).
10. Figurine of terracotta (No. 339, Fig. 193).
11. Figurine of terracotta (No. 340, Fig. 193).
12. Figurine of terracotta (No. 341, Fig. 193).
13. Small table of terracotta (No. 334, Fig. 196).
14. Figurine of terracotta (No. 342, Fig. 193).
15. Figurine of terracotta (No. 343, Fig. 193).
16. Figurine of terracotta (No. 344, Fig. 193).
17. Figurine of terracotta (No. 345, Fig. 193).
18. Small pot with basket handle (No. 330, Fig. 168).
19. Bull's head of terracotta (No. 346, Fig. 193).
20. Small stirrup vase (No. 331, Fig. 167).

21. Small squat jar with two handles (No. 332, Fig. 168).
22. Stem of cylix (No. 333, Fig. 169).
23. Small stirrup vase (No. 406, Fig. 167).

All the earth from the tomb was sifted, but the only objects to add to the foregoing list were two whorls or buttons of steatite and a small bead of carnelian.

The terracottas, comprising eleven figurines, one table, and one bull's head (or fragment of an animal) form the most noteworthy group of objects from Tomb XXXV, and should perhaps throw some light on the character of the persons buried here. The significance of such offerings in Mycenaean tombs is, however, by no means clear, and rather than venture into the field of conjecture one may perhaps more wisely leave the elucidation of the problem to future research.

The two Mycenaean chamber tombs which have now been described were not rich in contents; indeed, apart from pottery (and terracottas) it must be admitted they yielded a rather thin harvest. They produced no gold, no jewelry, no objects of ivory or other costly materials, no bronze weapons or utensils. But it should be remembered that they are not the sepulchres of kings or of the great nobles of a Mycenaean metropolis; they are the simpler burial places of impecunious dwellers in a small country settlement, and as such their modest contribution to our ever-increasing knowledge of Mycenaean civilization need not be scorned.

The tombs can be assigned without question to the Third Late Helladic stage; in form and method of construction they do not differ materially from scores of similar tombs at Mycenae and elsewhere, belonging to the long period of Late Helladic III. For a more exact dating within that period we must turn to the objects found inside them, and here the pottery is of prime importance. The discussion of the vases may be left to the chapter on pottery; here it need only be said that they appear to fall neither at the beginning nor at the end of Late Helladic III, but take a place somewhat earlier than the middle of the series.

TOMB XXV. Before going on to the next section, brief mention should be made of Tomb XXV, a short distance to the west of No. XXXV and higher up the slope. This appeared at first, when excavation began, to be the *dromos* of yet another Mycenaean chamber tomb, 0.62 m. wide, with well-cut sides splaying apart as they were followed downward. This *dromos* was cleared for some distance until it was found to end against a mass of uncut *stereo*. Further examination showed that there was certainly no tomb here; the cutting may be the unfinished working of the *dromos* of a tomb which had been begun, but was abandoned for some reason before completion. It was excavated to a depth of *ca.* 2 m.; near the bottom appeared a large slab of *poros* lying partly on its side, and broken into several pieces. Beneath it was found intact an unpainted jug of the Third Late Helladic Period, of the kind in which a workman might carry his supply of water (as a matter of fact, it is also very similar to the unpainted jugs from Tombs XXXIII and XXXV, and may have been intended as a sepulchral offering). No trace of burial or of any further objects came to light.

A GROUP OF TOMBS OF INDETERMINATE DATE

Tomb IX. Six metres northwest of No. VII a cist-grave was discovered, with its longer axis running from north to south. It was covered by a single slab of worked *poros*, 1.54 m. in length by 0.90 m. in width, and having a thickness of 0.15 m. to 0.18 m., which lay only 0.25 m. below the surface of the ground. Beneath this was a narrow cist cut in *stereo*, ca. 0.36 m. wide, 1.25 m. long, and 0.55 m. deep. It was filled with firm yellowish earth, not much different from the surrounding *stereo*, at the top of which lay a thin layer of loose grayish brown soil. No bones appeared and no objects of any kind.



FIGURE 55. SLAB COVERING TOMB IX

TOMB X. About ten metres north of No. VII another grave was brought to light, almost a counterpart of Tomb IX. It was covered by a *poros* slab running from east to west, with a length of 1.52 m., width of 0.90 m., and thickness of 0.24 m. (Fig. 56). Immediately beneath it was a thin deposit of very soft loose sandy soil, containing many small stones, below which a shallow pit with rounded ends took shape, apparently cut in *stereo* exactly like that of Tomb IX, but smaller. It contained no bones and no objects.

TOMB XV. Some four metres northeast of No. VII lay a third grave of the same type as the two just described (Fig. 57). It was covered by a slab of *poros* laid lengthwise from north to south, and measuring 0.84 m. in width and 0.29 m. in thickness. Its preserved length was 1.25 m., but the south end had evidently been hacked off and the original dimension thus lost. The top of the slab was only 0.30 m. below the surface of the ground. Just to the south lay a tile-grave running from east to west and the mutilation of the *poros* slab must certainly date from the time of this later burial when a trench was cut across its south end to permit the tiles to be set in place (Plan shown in Figure 58). Beneath the slab

was a narrow cist cut in *stereo*, 0.42 m. wide, 1.60 m. long, and *ca.* 0.45 m. deep. It contained soft grayish brown soil at the top, gradually changing to firmer earth until *stereo* was reached at 0.45 m. to 0.50 m. No bones came to light, and the sole object found was a small potsherd of coarse wheel-made ware, very likely an intrusion from the period of the Roman grave (see p. 72).

These three graves, Nos. IX, X, and XV, form a very puzzling group, presenting no satisfactory explanation and no internal evidence of date. In the case of IX and X the *poros* slab covering the cist had apparently never been disturbed, and yet the grave contained no remains whatsoever. Presumably the loose soft earth, a thin layer of which was found in each grave immediately beneath the lid, is all that remains of the decomposed matter of the body. In all three instances the cover is a fairly well cut, substantial, squared slab of *poros*, though not finished with the care and precision usually seen in Greek graves of the classical period. Lids of this kind must be extremely rare, if indeed they occur at all, in prehistoric tombs. In the case of Tomb XV the external evidence indicates a date earlier than late Roman times, for the cover slab was damaged while lying in place, when the tile-grave was made close beside it.

As already intimated above, the late interment overlying the Early Helladic ossuary of Tomb VII must certainly be closely connected with this group, since it is in all respects similar, except for the preservation of the skeleton. Thus by external evidence the *terminus post quem* for our graves must be set at *ca.* 2000 B.C., the end of the Early Helladic Period, and the *terminus ante quem* in the fourth century, A.D., when the Roman burials seem to have taken place. The contracted position of the body in Tomb VII suggests at least that the graves fall early rather than late within these chronological limits, and I am inclined to think they may belong to the Middle Helladic Period, if not to an even earlier time.

THE GEOMETRIC PERIOD

TOMB XVIII. Tomb XVIII did not lie in the cemetery, but was observed by our sharp-sighted foreman, George



FIGURE 56. SLAB COVERING TOMB X

Alexopoulos, in the steep scarp of a cutting for the Peloponnesian Railway on the west side of the track at a point *ca.* 20 m. south of kilometric post 27.6 (Fig. 59). The grave apparently ran from east to west in a cist, 0.60 m. wide and 0.45 m. deep, cut in *stereo* and covered by a thin slab of crumbly *poros*. Most of the grave was evidently sliced away and removed at the time the railway cutting was made; curiously it seems

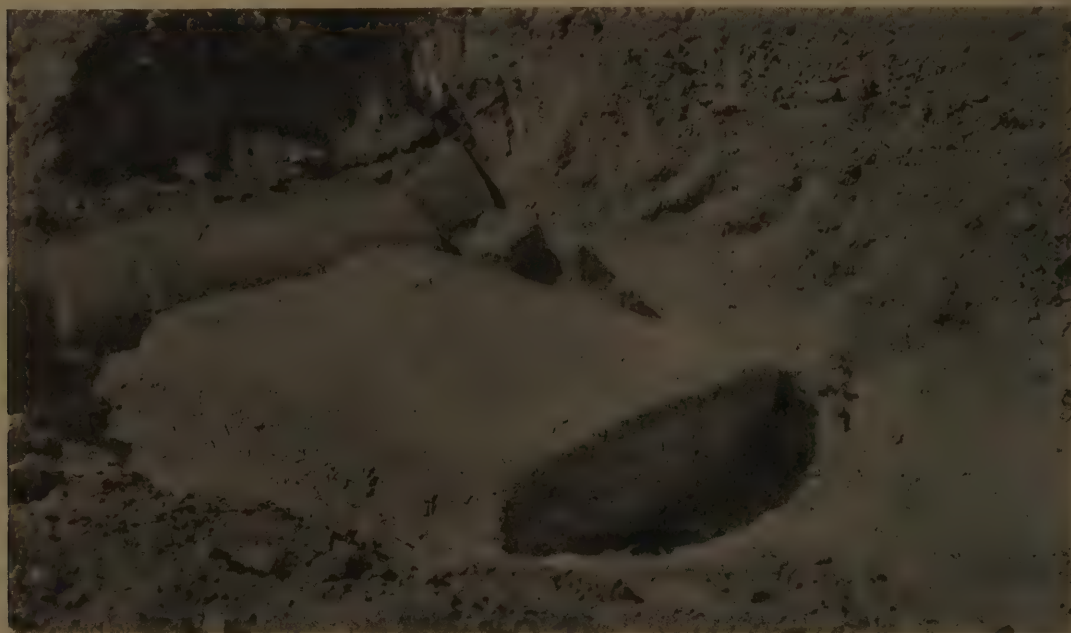


FIGURE 57. Tomb XV, FROM THE NORTHEAST

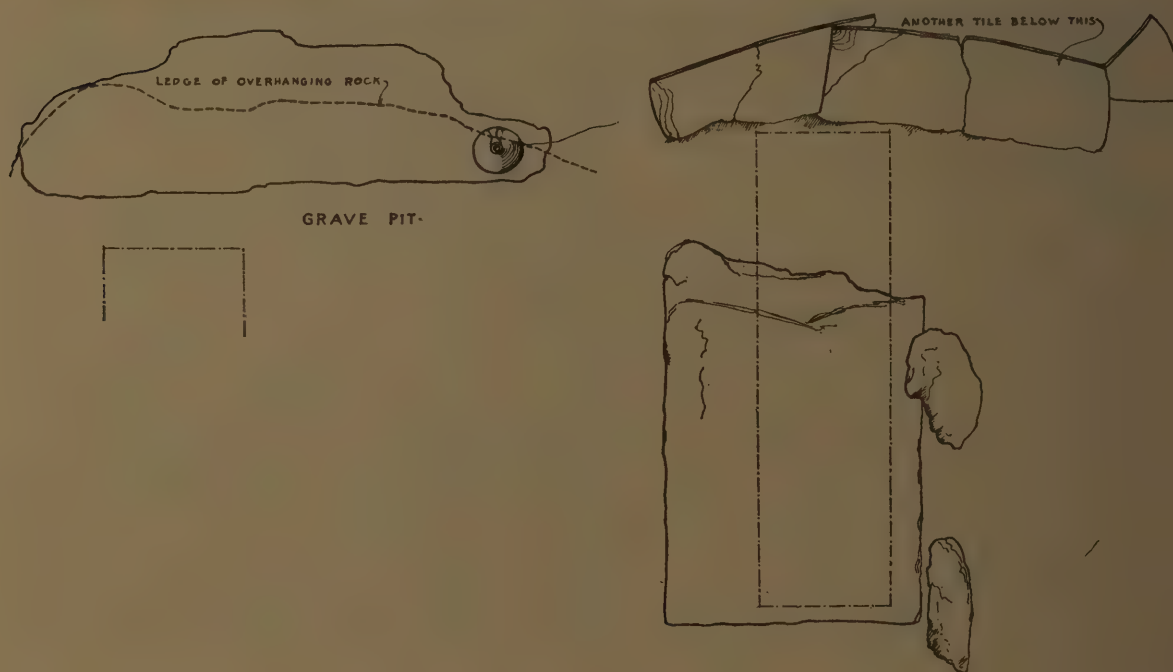


FIGURE 58. PLAN OF TOMBS XV AND XVa

not to have been observed, though the vases must have appeared in the face of the cutting, for the handle had been severed from the oinochoë and a large piece of the rim cut away from the crater, but both had been left in place. The portion of the grave remaining was the extreme west end, preserved to an average length of 0.27 m. In it were found two large Geometric vases, a crater (Fig. 172) and an oinochoë (Fig. 171), and below them a heavy plain bronze ring. There was no trace of bones; the skeleton had certainly occupied the eastern part of the grave.



FIGURE 59. TOMB XVIII, FROM THE EAST

THE ROMAN PERIOD

The Roman graves were by far the most numerous in the cemetery and were well distributed over the hillside. Many when opened were found empty of all remains, containing neither bones nor other objects of any kind. What had caused the total disappearance of the bones from these graves and the almost complete dissolution of the skeleton in others, and left almost no remains in such condition that they could be handled, was not obvious to me; perhaps it is something in the composition of the soil peculiar to Zygouries. At any rate, no other cemetery known to me seems to have suffered so much in this respect.

In the present report only a few of the Roman graves which contained some object worth noting, or proved interesting from their method of construction will be described. Indeed not all of those discovered were opened; the scanty results from those examined were not such as to encourage extensive research in graves of this period, and their exploration was left to the last, when it had to be somewhat curtailed by the end of the time available for the excavations.

TOMB VIII. This grave, in its construction representative of the commonest type, lay some 15 m. northeast of Tomb VII, down the slope of the hill. In *stereo*, along the north base of a vertically cut ledge of rock, a narrow shallow bed had been scooped out, just large enough to receive a body. After the burial this trench was covered with tiles, one large one (0.858 m. long, 0.37 m. wide at its narrower end, 0.40 m. at its broader end) set on its side, and a smaller fragment (0.45 m. long) standing on its end, both leaning against the vertical ledge of rock (Fig. 60). To the east of the smaller tile were several additional fragments filling out the rest of the length of the grave. The tiles are of the curved type.

The shallow bed of the grave was filled with soft grayish brown earth in which no trace of bones appeared. At the east end of the large tile a small, coarse, wheel-made pot was found (No. 567, Fig. 175); there were no other objects in the grave.



FIGURE 60. TOMB VIII FROM THE EAST

TOMB XII. An example of a different type was uncovered about ten metres south of Tomb VII. This is an oval shaft cut in soft rock with a length from northeast to southwest of 2.06 m. and a width of *ca.* 0.55 m. It was covered by three large curved tiles placed horizontally side by side with their concave surface up, while smaller fragments and bits of *poros* had been used to reach to the east end (Fig. 61). The tiles, which had been laid cross-wise over the grave, each end resting on a level shelf cut in *stereo*, *ca.* 0.40 m. below the surface of the ground, had collapsed and broken into fragments.

The grave itself, 0.65 m. deep, was filled with earth; no traces of bones were found and no objects.

TOMB XIII. In a trial trench some five metres west of No. VIII, a Roman grave of another fairly common type came to light. This proved to be a simple shaft, 1.52 m. long

from east to west and *ca.* 0.50 m. wide, with no cover of any kind. Beginning at 0.40 m. below the surface of the ground, the shaft was cut in *stereo*, continuing 0.60 m. farther to the floor. Near the east end of the grave, which was rounded off, the badly decayed remnants of a skull were found (1 and 2 on the plan), and just west of it lay a few small decomposed bones (3 on the plan). No other bones could be distinguished in the grave, but the position of the skull indicates that the body had been laid with its head toward the east.

Near the middle of the north side of the grave lay a small jug (numbered 4 on the plan), the handle of which was missing. The most important find from this tomb, however, was a bronze coin which was recovered when the earth was sifted. It is a fairly well-preserved piece, bearing on the obverse the head of Constantius Gallus to r. with head uncovered;



FIGURE 61. TOMB XII FROM THE NORTHEAST

behind the head, Δ ; and on the reverse an armed warrior with helmet and shield piercing with a large spear a small enemy on a stumbling horse to l., who is trying to keep from falling off by putting his arm around the horse's neck; in exergue, RQZ; in field, T. The inscription reads:

Obverse: D N FL CL CONSTANTIUS NOB CAES

Reverse: FEL TEMP REPARATIO

The coin ¹ was presumably struck while Constantius Gallus was emperor or co-emperor, from 351 to 354 A.D.; in any case it gives the middle of the fourth century as the *terminus post quem* for the date of Tomb XIII.

¹ Cf. Cohen, *Monnaies Frappées sous l'Empire Romain* (second edition), VIII, p. 32, No. 8.

TOMB XIV. Five metres north of No. XIII lay a similar shaft-grave, likewise not provided with a cover. Cut in *stereo*, it had a length from east to west of 1.50 m. and varied in width from 0.48 m. at the west to 0.70 m. near the east end (Fig. 63). The floor of the grave was reached at a depth of 1.05 m. below ground. No bones were found, but almost in the northeast corner stood a small jar, wheel-made, of coarse fabric (No. 568, Fig. 174). There were no other objects.



FIGURE 62. PLAN
OF TOMB XIII



FIGURE 63. PLAN OF
TOMB XIV



FIGURE 64. PLAN OF TOMB XVII

TOMB XVa. The Roman grave just south of No. XV has already been mentioned. It was similar to Tomb VIII, consisting of a shallow bed hollowed out at the foot of a ledge of rock, and protected by large leaning tiles, resting on edge (Fig. 58). Only two tiles appeared before the grave was opened; the westernmost was 0.95 m. long by 0.35 m., the easternmost 0.78 m. long, and the two overlapped for a distance of *ca.* 0.25 m. They were of the curved type, with their convex sides outward. A smaller fragment of tile covered the west end of the grave; when the two complete tiles were removed a third was found directly behind the larger one, and the fragment at the west end was shown to belong to this third one.

The bed of the grave was 1.72 m. long from east to west; of irregular shape, it varied in width from 0.23 m. at the west end to 0.53 m. near the middle. At this latter point it was

also undercut for an extent of 0.25 m. beneath the ledge, which thus overhangs the southern side of the grave. No bones were found, but at the extreme west end of the grave stood a sturdy squat jug (No. 323, Fig. 175) of substantial fabric.

TOMB XVII. Some five metres east of Tomb XV another example of the shaft-grave type without a cover was cleared. It was a fairly large pit cut in *stereo* with sides roughly parallel and corners rounded; from east to west it measured 2.30 m. and had an average width of 1.10 m. (Fig. 64). The floor of the grave (*stereo*) was encountered at a depth of



FIGURE 65. TYPICAL GRAVE PITS UNDER LEDGES OF ROCK

1.10 m. below the surface of the ground. No bones were found, but close to the southwest corner of the pit stood a small bowl of coarse red ware with a flanged rim (No. 368, Fig. 174).

TOMB XXIII. The two tile-graves, one on either side of the shaft which provided access to Tomb XXIII, have already been mentioned. They were quite like Nos. VIII and XVa. Nothing was found in either of them except a thin layer of loose dark earth, which might have been the decomposed material of the bones.

TOMB XXXIII. Reference has already been made to the cist-grave in the northeast corner of the chamber of Tomb XXXIII, built of stones and pieces of Greek tiles, with a cover made of narrow *poros* slabs and a fragment of a huge pithos. In method of construction this cist is different from the other late graves found on the hill, but like them it yielded only the scantiest traces of bones and was empty of objects.

TOMB XXXV. The two shaft-graves in the *dromos* of Tomb XXXV, which produced nothing, require no further mention here, and the tile-grave above the collapsed chamber of the same tomb, to which the three pots found in the doorway probably belonged, has already been discussed.

In this late period of the cemetery, graves with a cover of leaning tiles are considerably more numerous than uncovered shaft-graves. In what may be regarded as the normal type the tiles shelter a shallow trench, not far below the surface of the ground, cut in *stereo* at the base of a rising outcrop of rock (Fig. 65). But in some cases, such as that of No. XXIII, tiles were used in the same way at the bottom of a regularly cut shaft, where they certainly seem out of place. This leads one to suspect that the shaft-graves may already have existed here before the period when the tile-graves became customary; and that when occasionally a man seeking a place to hollow out a bed for an ordinary tile-grave stumbled by accident upon a well-cut shaft, he took advantage of it and treated it exactly as if it were an open ledge. If this was actually the case no shaft-grave containing its original interment was found. The three described above (they had no covers, which must almost surely have been placed over them in their original use), Nos. XIII, XIV, and XVII, as they were found, were certainly of late Roman date; and a comparison of the three vases they yielded with three pots from tile-graves (Figs. 174 and 175) indicates without question that the two types were employed contemporaneously. On the evidence of the coin from Tomb XIII one need not hesitate to assign this whole group of late Roman graves to the latter part of the fourth century A.D. But the period of the original construction of the shaft-graves must remain an unsolved puzzle in view of the total absence of evidence.

CHAPTER IV

THE POTTERY

AN immense quantity of pottery came to light in the course of the excavations; indeed, had nothing else been found, Zygouries would still be a noteworthy site for its series of Early Helladic and Late Helladic vases. The pottery groups discovered on the floors of the Early Helladic houses were many and in some cases comprised an unusually large number of intact or complete, though broken, specimens; and certainly the stock of the potter's shop, including upwards of one thousand Late Helladic vases, constitutes a remarkable find in itself. But apart from these, vast quantities of sherds were unearthed everywhere about the settlement wherever ground was broken; hardly a trench failed to return its quota in heaping basketfuls. The abundance of material proved at times a veritable embarrassment of riches, when all available receptacles had been filled and the workroom was crowded to overflowing.

So far as possible all sherds were given a preliminary washing at the site, one or two boys being regularly detailed to this task. After being thereupon subjected to a rough appraisal and a considerable reduction in bulk through the elimination of the coarser and less significant fragments, they were conveyed to the *metochi*, where they were thoroughly cleaned with the aid of hydrochloric acid. Whenever a basket appeared to contain several fragments of the same pot, no sherds were thrown away until all had been cleaned and an effort made to fit the vase together. At the close of the excavations all the material was transported to Old Corinth and was eventually installed in a special workroom, leased by the Government as an annex to the Museum. A trained vase-mender, Georgios Kontogeorgis, was kindly assigned to us by the Archaeological Department of the Ministry of Education, and with a staff of three learning assistants spent six months in mending and restoring the broken vases. This work has continued intermittently ever since, many months each year being devoted to it up to the time of the writing of the present report (October, 1925), and Kontogeorgis' pupil and successor, Dimitrios Bakoulis, has proved himself a very skilful and dexterous craftsman. More could no doubt still be done in this line; the material from the potter's shop, for example, is by no means exhausted. The vast majority of the unpainted cooking pots have not been mended, and without doubt further specimens of the other undecorated vessels could still be put together. But when from ten to fifty examples of each shape had been reconstituted it hardly seemed worth while to continue into the hundreds, since they could yield no new information, nor was the space available to place them on exhibition. All the other material has been patiently and thoroughly worked over, and I do not think that much of significance or value has escaped attention.

EARLY HELLADIC PERIOD

The pottery of the Early Helladic Period falls naturally into and supports the system of classification proposed in the *Annual of the British School at Athens*, XXII, pp. 175 ff., and adopted in the report of the excavations at Korakou, and it will be described in this chapter in the order of that classification. Not a single vase of this Early Helladic ware at Zygouries, so far as I have observed (and I have handled an enormous number of sherds), appears to have been thrown on the potter's wheel; all seems unquestionably hand-made.

A. POLISHED WARE

I. Hand-polished ware of the early type found just above native rock at the bottom of the deeper trenches at Korakou was comparatively rare at Zygouries. The first category, comprising plain polished ware, apparently without a slip, occurred only, and in small quantity, just above *stereo* in a deep trench south of the mound (Trial Trench VI), and in a deep pit, perhaps a *bothros*, which was revealed by a trial trench (Trial Trench VIII) in a field some distance below the northwest foot of the hill. This *bothros* was packed with stones, bones, and masses of pottery, all of which had apparently been thrown into it in Early Helladic times. The potsherds collected filled several large baskets; much of this was coarse material, but fine fragments were also fairly numerous, the bulk of them belonging to the hand-polished group. Most of these in turn were of the more advanced type, to be discussed in the following section, but some few clearly must be assigned to the first category. In Trial Trench VI we seem also to have an early deposit composed almost entirely of hand-polished wares, among which was a sprinkling of the more primitive-looking unslipped variety.

This hand-made ware is all in a very badly shattered condition and no complete pots could be put together. Generally it seems to be a very coarse fabric, thick and heavy, with large gritty particles left in the clay. The clay is usually gray at the core, changing to brick-red at the surface. The firing was not of a very high order, having no doubt been carried out in a primitive and imperfect kiln: as a result the biscuit is not very hard and crumbles away when rubbed.

The surface of the vase is usually only lightly polished, though some few sherds show a brilliant burnish. The color is red, but occasionally a mottled effect is produced by black patches, appearing irregularly and without pattern. No slip can be distinguished.

Many of these sherds are marked with careless incisions, forming simple linear patterns, generally groups of parallel lines. The incised lines are usually rather fine. Sometimes they appear as oblique parallel dashes along the top of the rim, and in one case (PLATE IV, No. 12) a good herring-bone pattern is incised along the rim, on the upper side of the long lug handle, as well as on the semi-volute ends of the latter. Spirals also occur (*ibid.*, No. 9) as well as concentric circles and cross-hatching (*ibid.*, No. 10). One sherd (*ibid.*, No. 1), from a large closed vessel, bears as decoration a series of raised horizontal bands which are marked by short parallel vertical dashes close together; the clay in this example is gray at the core, terracotta red at the surface, and is filled with small particles of silvery mica;

it is quite different from the ordinary local clay and almost surely indicates that we are dealing with an imported piece.

The shapes seem to include shallow basins, bowls, and some kind of a large goblet with high strap handles — types which are all well exemplified in the slipped ware of the following section. It must be admitted that it is sometimes very difficult indeed to distinguish these two categories, the slipped and the unslipped; but in the material described above it seems certain that the surface of the pot has been polished directly without the intermediary of a slip. These pots are of course not necessarily older than the slipped ware with which they were found, but it is probably safe to say that they carry on an earlier type or tradition.

II. The second category of polished ware is represented by a great many more specimens than the first. They came chiefly from the massed deposit in the *bothros* mentioned above, from the deeper levels of the trench south of the mound (Trial Trench VI), and especially from certain shallow, basin-like hollows — probably the bottoms of *bothroi* — brought to light in a cutting into the west scarp of the hill (p. 28). A few sherds were found here and there throughout the settlement and an especially fine variety of a related ware was represented by the fragments of one or two pots in almost every Early Helladic house excavated. But this variety, which will be described separately, differs not a little from the normal slipped fabric now under discussion, and is undoubtedly a more advanced and later product. Accordingly the bulk of this polished ware, which as a whole is certainly an early group, is seen to come not from the settlement itself, but from the slopes and flat ground round about to the south and west — a fact which will have to be borne in mind in a consideration of the date and the “history” of the settlement.

The ware of this section corresponds fully with the finds of early date from Korakou and Mycenae (*B. S. A.*, XXV, p. 66). It is all made without the use of the potter's wheel; some of it is coarse and some fine, but it is all on the average a very good ware. The clay seems to have been pretty well purified, though not entirely free from foreign particles; it is often reddish buff right through, often gray at the core, changing to reddish buff at the surface. The firing seems to have been managed somewhat more effectively than in the ware of the first category (A I); but here too the biscuit shows a tendency to crumble when rubbed.

The surface is coated with a firm slip which is fairly well, sometimes brilliantly, polished (PLATE V). The color is almost always red and tends to be very bright; but mottling is common and appears in black, orange-red, and red on the majority of the pots. It does not seem to have been manipulated to form patterns. In some cases the slip has come off in small flakes here and there on the vase, but it is usually very durable. The marks of the implement used for polishing are clearly visible; sometimes they are very fine lines, appearing almost like pencil strokes on the inside of a bowl (and that they were applied with some pressure is shown by the slight groove they have often made in the slip); sometimes they are much broader marks. The instrument employed may have been a piece of bone; at any rate it is difficult to understand how smooth leather could have produced the fine lines.

The base of the pot is usually flat, or flat at the edge and slightly hollowed toward the centre (PLATE V, Nos. 13, 14); at least ten of each dozen examples are of these types.

But raised bases also occur, though the somewhat squat form and the slight hollow underneath generally betray their development from the other type (PLATE V, Nos. 15, 16).

The material was very fragmentary and not much could be put together. Among the shapes noted are shallow bowls with incurved rim (No. 564, PLATE VII),¹ plates with a broad flat rim (PLATE V, No. 6), a jug with a high neck (PLATE VI, No. 9), shallow basins with lug handles, a goblet or open vessel with high strap handles (PLATE VI, No. 8), the pyxis (PLATE V, No. 11), and a pithos with large projecting cylindrical lifting bosses (PLATE VI, No. 11). Shallow bowls are by far the commonest and occur in many varieties of profile. Sauceboats are very rare; only one or two sherds seemed to belong to pots of that shape.

The bulk of this ware is plain (PLATE V), but in many cases an attempt at simple decoration has been made, appearing chiefly in groups of parallel incised lines on the body of the pot or on the handle (PLATE VI). Cross hatching, concentric circles (PLATE VI, No. 3), bands of spraylike chevrons (PLATE VI, No. 7), and a band of two parallel lines enclosing a row of punched dots (PLATE VI, No. 9) also occur among the patterns. The lines are fairly deep, careless strokes made before the vase was fired; no evidence remained to show whether or not they had ever been filled with white matter. A series of wedge-shaped impressions stamped alternately from one side and then the other gives the effect of a raised zigzag line along the broad rim of a highly burnished shallow basin (PLATE V, No. 2).

A distinct improvement in the glaze medium so as to produce a good lustrous effect on the surface of the vase when fired — no doubt the invention of a progressive potter, or imported by him, perhaps from Crete — was almost surely responsible for the abandonment of the technique of polishing. A handsome bright, almost metallic, finish (PLATE VIII) could thereafter be obtained much more easily and simply than by the old-fashioned method of burnishing by hand. The new style was no doubt very speedily and generally adopted for ordinary pottery, and burnishing was henceforth employed only for special purposes. Glaze of a sort must already have been in use for some time before it was perfected, for it appears on some of the pottery found in the deep deposits which contained the earliest polished ware. Some shapes of interest recovered from this context will be discussed in the section dealing with glazed ware (Group B); here need only be mentioned, as confirming the early date of polished ware, that the deposit contained a good many bases of large pots marked with mat impressions, close analogies to the similar phenomena observed on the early pottery from the Cyclades (Fig. 109). The fragments of polished ware already mentioned, which show an incised decoration of spirals, connected by tangents (PLATE IV, No. 9), and other simple designs must not be forgotten in the list of Cycladic parallels.

The particularly fine variety of slipped and polished ware reserved for separate discussion is certainly of later date than the material with which we have just been dealing. Only one example of it was found in the three early deposits mentioned above; on the other hand it occurred, as I have stated, on the floors of almost every Early Helladic house that

¹ No. 564. Ht. 0.09 m., D. 0.167 m., D. of base, 0.067 m. Buff clay. Slip mainly red, with mottled patches of black; surface smoothly polished, with fine marks almost like pencil lines. Interior coated with grayish black glaze, crackled and almost lustreless.

was cleared, although never in large quantity. It was all badly shattered, and the sherds collected represent perhaps two or three vases to each house, certainly not much more.

It is an extremely well-made kind of pottery, hard and thin, sometimes almost approaching egg-shell fabrics in delicacy. One cannot fail to admire the skill of the potter who, without the help of the wheel, produced such slight and shapely vases. The clay is of a fine quality and well levigated, apparently quite free from grit. It is sometimes pink or buff in color, but usually appears gray or almost black at the core, changing to a lighter hue at the surface. The firing was efficiently done, the fabric being thoroughly baked, firm and hard. Indeed these vases have, when struck, the musical tinkle of well-made china, and the very hardness and thinness of the fabric have caused them, when demolished, to shatter into numerous small fragments like glass. The reconstruction of one of these pots from its broken pieces is therefore a difficult task, but there is one compensation for the mender: the fractures are almost always sharp and clean.

The whole surface of the vase, inside and out (except in the case of closed shapes, such as jugs, where the interior could not be reached), was coated with a fine slip, apparently yellow or cream-colored when applied. In the firing a vivid mottled effect was often obtained, and the finished surface, which was smoothly polished, usually presents a variety of colors running from grayish black or even deep blue to orange-yellow and almost white. The dark shades almost always occur in shapeless blotches, appearing irregularly here and there about the vase just as in the contemporary mottled ware from Vasiliki (Seager, *Transact. Dept. of Arch.*, University of Pennsylvania, 1905, Vol. I, Part III, pp. 215 ff.). Wherever these blotches are formed the whole fabric seems to have been affected, though the carbonization does not in every case go through the biscuit to the inner surface. In a few cases the whole vase is dark, ranging from almost black to gray, as if completely permeated with carbon; in other instances the slip has a clear yellowish buff finish over the entire pot, quite free from darker discolorations.

Some few fragments bear simple incised decoration. On a large sherd from a jug (PLATE IX, No. 6) this consists of a double row of dots around the base of the neck and a large design similarly executed in the field. In another instance a single row of short slanting gashes appears just below the rim of an askos (PLATE IX, No. 5).

Another type of decoration consists of raised bands, sometimes rounded, sometimes fairly sharply ridged, which are applied in sweeping wavy lines, two or three or more, variously spaced, forming a simple plastic diversification of otherwise plain open spaces. The shape on which this style seems chiefly to occur is a jug with a fairly high neck (PLATE IX, Nos. 2, 3, 4).

The shapes represented are "sauceboats," jugs, askoid pots, cups, shallow bowls, deep bowls or jars of a spherical form, narrowing considerably toward the opening, and a kind of pyxis with its lid. Among these, "sauceboats" are easily the commonest and shallow bowls are rare. A curious vase in the form of a bird with extended wings (PLATE XXI, No. 6) is a unique specimen. Almost all of these pots are of small size, but a few fragments of one or two large vases, the shape of which could not be determined, show that the same technique could be employed for vessels of respectable dimensions.

Since no adequate account of this ware has hitherto been published, a more complete description of a few examples may be permitted.¹

No. 317, PLATE IX. Sauceboat found in 67 fragments just outside the northwest corner of House L. The base is missing and has been restored in plaster. The body of the vase is 0.125 m. high, rising to an extreme height of 0.195 m. at the tip of the spout; crosswise it has a diameter of 0.115 m.; lengthwise to the end of the spout, 0.145 m. It has a substantial vertical handle (which is apparently the regular type in sauceboats of this ware), divided longitudinally by a shallow groove down the middle. The lower attachment of the handle is rectangular with a distinctly metallic appearance. The pot has thin walls and the delicate

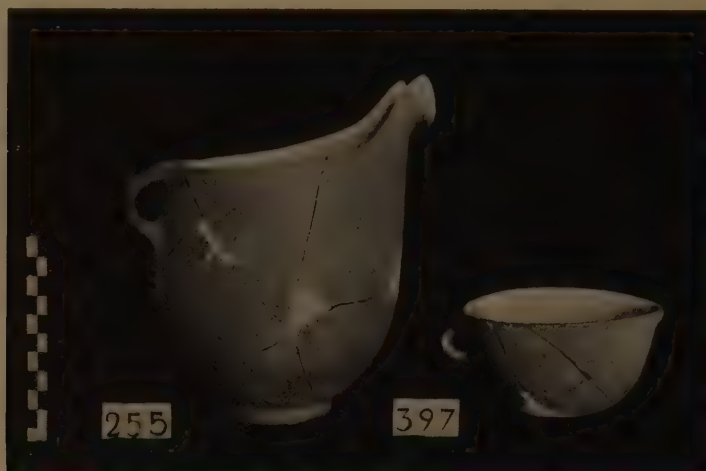


FIGURE 66. YELLOW MOTTLED WARE, EARLY HELLADIC PERIOD, CLASS A II

straight rim is shaped with a sure hand. The spout is fairly broad and shallow (0.063 m. wide).

The clay is gray at the core, lightening to pink at the surface, and is of a thoroughly purified quality. The surface is coated with a firm slip, smoothly polished except on the inside of the vase; the fine marks of the polishing implement are easily distinguishable. A striking mottled effect is produced by five large and two or three smaller bluish black blotches distributed about the vase, while the rest of the surface exhibits various shades of yellow.

No. 255, Fig. 66. Sauceboat of similar type, but not so fine, restored from seventeen fragments found in Trench V. Most of one side is missing. The body of the vase is 0.139 m. high, increasing to *ca.* 0.179 m. at the tip of the spout; width, 0.107m.; length, not in-

¹ A list of the pots of this yellow mottled ware found in the houses, as deduced from the fragments, follows:

HOUSE D
2 askoid jugs, 2 sauceboats, 1 jar
HOUSE A
1 sauceboat
HOUSE OF THE PITHOI
2 sauceboats, 1 jar
HOUSE OF THE SNAILSHELLS
4 sauceboats, 2 jars, 1 askos or jug

HOUSE W
3 sauceboats, 2 askoi, 1 small jar or cup
HOUSE S
2 sauceboats, 2 askoi
HOUSE L
6 sauceboats, 3 jugs, 1 askos, 1 shallow bowl, 1 pyxis
HOUSE Y
1 sauceboat, 1 jar

cluding the handle, *ca.* 0.14 m. The pot is unusually tall for its length, and its upright lines contrast with the more horizontal lines of the average sauceboat. The vessel stands on a well-shaped raised base. The vertical handle is similar to that of No. 317, but is not fashioned with such clear-cut lines; its attachment below is rectangular and metallic in origin. The spout is comparatively short and slender (width at end, restored, *ca.* 0.042 m.), with its lip sharply rolled. The clay is light buff throughout; on the surface is an excellent polished slip of the same color, uniform over all without blotches and mottling.

No. 286, Fig. 67. Forward part of a large askoid pot, put together from nine fragments found on the floor of the House of the Snailshells. It has fairly thick walls, but is of good

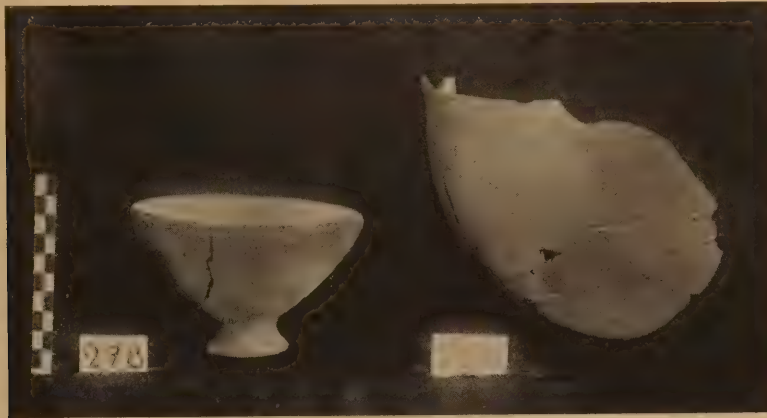


FIGURE 67. YELLOW MOTTLED WARE, EARLY HELLADIC PERIOD, CLASS A II

fabric, made of well-sifted clay. The latter is a light brick-red in color right through the biscuit. The cream-colored slip coating the surface is not so durable as is usual in this ware, having worn through in spots. It is almost uniform in color; there is no mottling, though one patch has turned yellow. The slip was applied on the inside surface in a band only, 0.04 m. wide, along the rim. The bottom of the askos was flattened to serve as a base.

No. 1, PLATE XXI, No. 6. A peculiar diminutive vase in the form of a bird with extended wings. More than one half of the rim and the upper part of one side are missing and the lower end of the stem is broken away. As preserved, the vase is *ca.* 0.05 m. high, measures 0.064 m. across the wings, and 0.065 m. from back to tip of beak. The heavy stem, 0.035 m. wide, through which an opening seems to have communicated with the interior of the pot, did not provide a vertical support, but was adjusted at an oblique angle, slanting down forward. This fact and the curved shape of the fracture, with which the stem now ends, suggest that our little vase is part of a *kernos*, having been one of several similar vessels attached to, and connected by, a horizontal tubular ring. The *kernos* is a shape familiar enough among the vases of the same general date as this from the Cyclades (*Phylakopi*, p. 102, *B. S. A.*, III, 1896-1897, pp. 57 ff.), but an exact parallel to this odd birdlike shape from Zygouries does not seem to have come to light.

The bird is crudely represented. It has broad horizontal wings (*ca.* 0.035 m. long and projecting 0.008 m.), flat on top and marked by careless oblique incisions, which are no doubt intended to represent feathers. On the side of the pot above the wings are similar

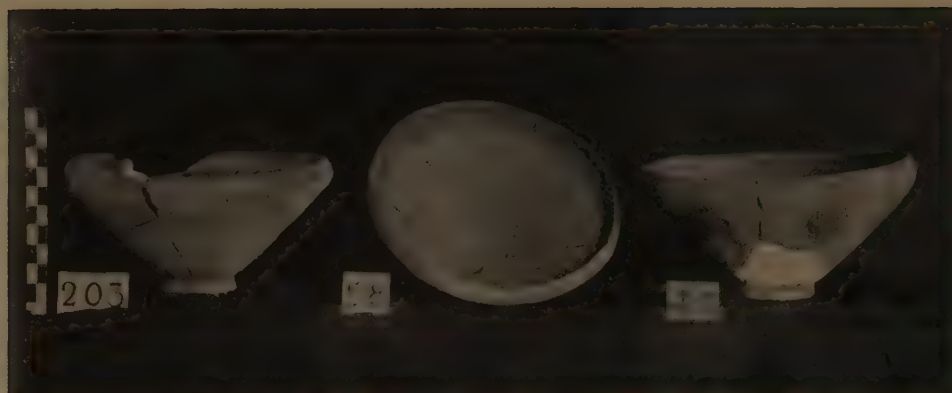


FIGURE 68. SHALLOW BOWLS, EARLY HELLADIC WARE, CLASS B I

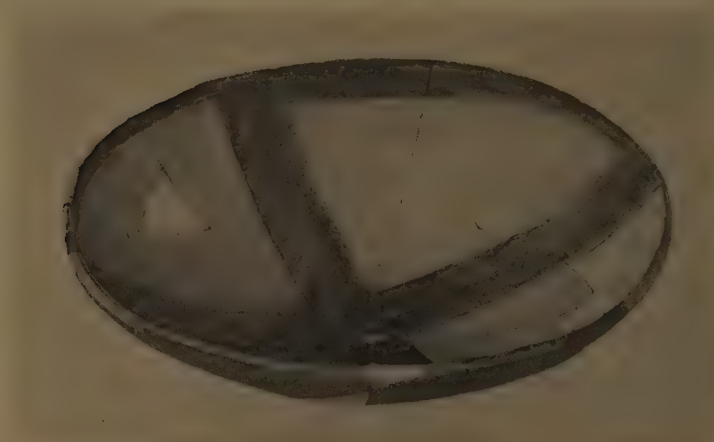


FIGURE 69. SHALLOW BOWL, EARLY HELLADIC WARE, CLASS B I, No. 55

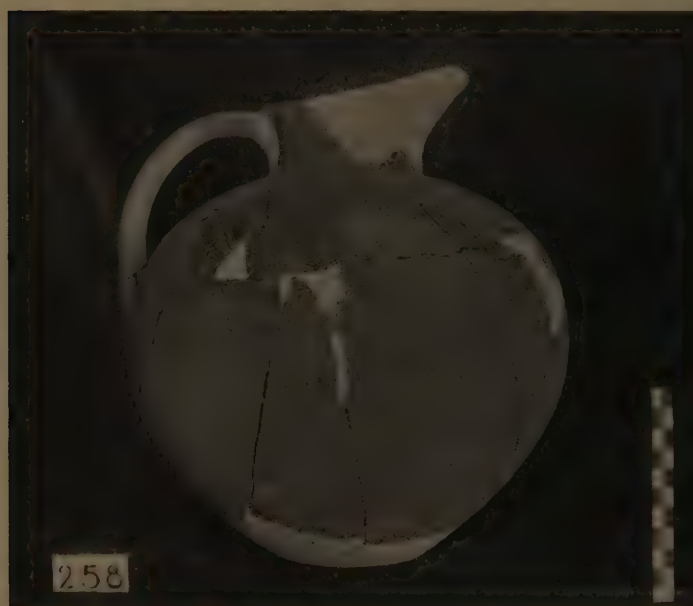


FIGURE 70. LARGE JUG, EARLY HELLADIC WARE, CLASS B I

incised lines. The head is only roughly indicated without details. The mouth of the vase, which is relatively narrow, has a diameter of *ca.* 0.018 m., and the general shape of the vessel is that of a small askos. The clay, as appears in the breaks, is gray throughout, made of finely sifted paste, and well baked. The surface is coated with a durable hard slip and is well polished; its color is an almost uniform grayish black.

No. 397, Fig. 66. Small cup, not quite complete, restored in plaster from six fragments. Rising from a flattened bottom, it has spreading sides and a slight flare at the rim; there is a single flat loop handle (mostly restored in plaster). The cup is of good fabric, made of well-cleaned pink clay; the surface is coated with a creamy yellow slip which was lightly polished. It is now in bad condition; the slip has worn through in many places, revealing the pink clay beneath, and few traces of the original polishing now remain. There is no mottling.

B. GLAZED WARE

To this group belongs the great bulk of the pottery from the Early Helladic occupation at Zygouries. The material was vastly more abundant than that from Korakou or Gonia and much better illustrations of the characteristic shapes can now be given. This glaze-technique undoubtedly lasted a very long time — its history seems to be almost as long as the Early Helladic Period itself. Within this long space of time some change or development might reasonably be expected, and there is in fact certain evidence to show that such was the case. It was not an abrupt transition, but seems to have been a gradual, long drawn-out process of deterioration. The evidence for this will be discussed after the pottery itself has been described.

I. *Partially Coated Ware.*

A good many intact or almost complete specimens were found. The fabric is not of the most excellent; the clay is good and fairly well screened, but the firing was in most cases inadequate, and the biscuit is often so soft that it wears away readily. Many of the pots are also badly distorted in shape as a result of warping during, or before, the baking. The surface of the vase was probably slipped, or at least washed, before the vessel was put in the kiln. It was not polished; indeed, in many cases it is irregular and rough; but these were ordinary household utensils, not vases made for exhibition.

1. The shallow bowl is by far the commonest shape. More than thirty complete specimens came to light, and fragments of hundreds or even thousands were recovered everywhere about the settlement. None occurred in the deep pits. They have a band of paint around the rim, inside or outside or both, almost always the latter. Some typical examples are shown in Figure 68; as may be seen, most of them are of no special interest or merit. One (No. 43) is distinguished by a few blotches suggestive of the mottled style; in another case (No. 55, Fig. 69)¹ two broad bands of paint form a large cross on the interior of the bowl.

These bowls vary widely in profile: there is no rule or regularity in the slope of the side, or in the curve of the rolled rim. The size also differs considerably, though the bowls are all

¹ No. 55. Ht. 0.043 m.; D. 0.17 m.



FIGURE 71. SMALL JUG, EARLY HELLADIC WARE,
CLASS B I, No. 42

rather small. Of the complete or restored examples twenty-nine have a raised base;¹ in two cases the bottom is merely flattened enough to permit the vessel to stand, but it should be noted that these two bowls are very much shallower and broader than the others (No. 55, Fig. 69, is of this latter type).

2. Jugs in this style were fairly common. They seem regularly to have a flattened bottom, a single handle and a sturdy neck with a broad shallow spout. Among the examples illustrated the largest (No. 258, Fig. 70)² has a flattened round handle; Nos. 42 (Fig. 71) and 93 (Fig. 72) have an ordinary round handle. Its curve in all cases suggests that the potter was fond of askoid shapes. The jugs have an almost spherical body and the shape is not ungraceful, though

the flat bottom is sometimes carelessly made and causes the pot to lean.

The upper half of the body is covered by a wash of glaze, a band of which also runs around the inside of the mouth. The lower half of the pot bears no paint save occasional smears from above. The glaze, which seems itself not to be of extremely bad quality, is carelessly applied in a coat far from uniform in thickness; fine brush marks are almost

¹ The raised base was usually made by attaching to the bottom of the vessel a separate strip of clay bent to form a ring. In the better examples the joint was carefully worked over and smoothed; in the poorer specimens the strip was crudely applied. In a few cases the base seems to have been attached in the form of a flat disk with a raised circumference.

² Jugs. No. 258. Ht. *ca.* 0.273 m.; D. 0.248 m. Greenish yellow clay, not too well levigated.

No. 42. Ht. *ca.* 0.118 m.; D. 0.111 m. Grayish buff clay.

No. 93. Ht. 0.195 m.; D. 0.198 m. Grayish green clay.

No. 191. Ht. 0.055 m.; D. 0.047 m. Pink clay; handle missing.

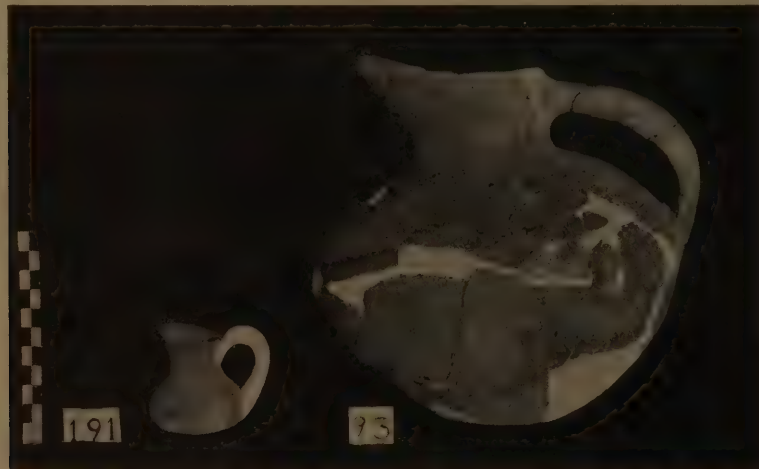


FIGURE 72. TWO JUGS, EARLY HELLADIC WARE, CLASS B I

everywhere visible, especially where the glaze is thin. The surface is certainly not bright, but a faint lustre is still preserved. In some examples much of the paint has been rubbed off and the bare surface of the vase appears.

A tiny jug of slightly different shape is shown in Figure 72, No. 191. The handle and part of one side are restored. It has a flat base, a squat broad body, and a relatively very large spout. It is made of pinkish clay, not very well screened. The final treatment of the surface seems to have been effected with a fairly stiff brush, which has left its marks everywhere. A lick of thin reddish paint along the rim is the only coloring that appears.

3. The large jar with narrow mouth (No. 54),¹ shown in Figure 73, has a broad and stocky, but not unattractive, shape. The bottom is flattened as a base, or meant to be, but

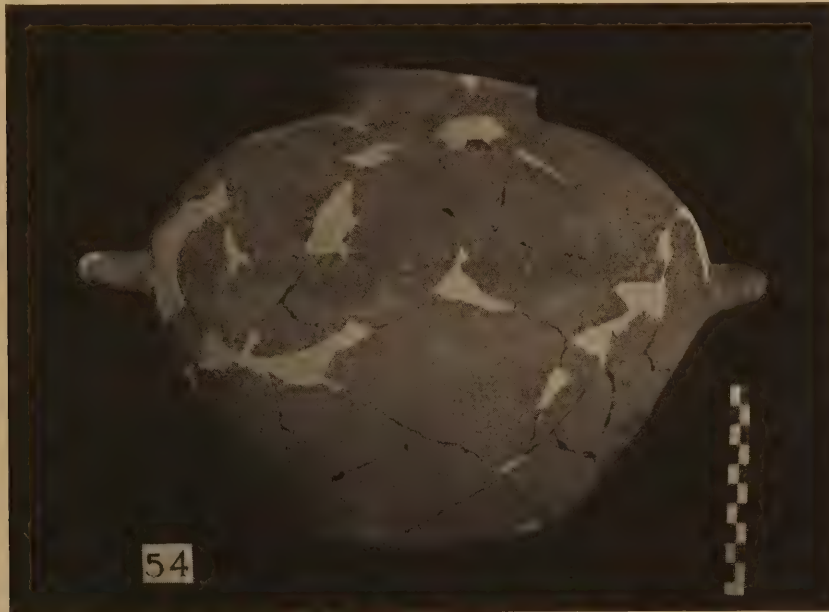


FIGURE 73. LARGE JAR, EARLY HELLADIC WARE, CLASS B I

actually has a slightly convex surface so that the pot does not stand well. Halfway down the side, opposite each other, are two heavy horizontal handles; the two smaller ones set perpendicularly to these, high up on the shoulder, seem hardly strong enough to assist materially in lifting the jar; perhaps they were used rather for guiding when the vessel was being tilted. The neck is low and ends in a vertical rim like a collar, which may have been meant to receive a lid.

The fabric is a far cry from that of the yellow mottled ware described above. The greenish buff clay is filled with extraneous matter; it is soft, not properly baked. The upper half of the pot above the large handles is coated with thin glaze, which also covers the upper surface of the handles, but not the lower. The glazed zone is not sharply divided from the unglazed; on one side a splash of thin paint has run far down into the zone below. The glaze preserves only a reminiscence of its original lustre.

A larger specimen of the same shape is that shown in Figure 74, No. 605.² It is largely

¹ Jar No. 54. Ht. 0.265 m.; D. 0.322 m.; D. of mouth, 0.119 m.

² No. 605. Ht. 0.333 m.; D. 0.359 m.; D. of mouth, 0.144 m.

restored in plaster, but enough of the pot was found to give the complete profile from the flat base to the rim. The clay is buff in color, not well screened, and is not baked to a great hardness. The upper part of the surface is coated with a wash of thin light-brown glaze. This jar is taller in proportion to its diameter than No. 54; it differs from the latter also in its neck, which splays slightly outward; and in place of the small upper handles it has high up on the shoulder two long narrow horizontal lugs, doubly pierced.



FIGURE 74. LARGE JAR, EARLY HELLADIC WARE, CLASS B I, No. 605

Other shapes in this partially coated style certainly occur. Among small pots may be mentioned sauceboats, one complete specimen and many fragments of which were found, bearing only a careless band of glaze along the rim. As to large vessels, it seems to have been the regular custom to treat them in the manner of the jar described above (No. 54). Numerous bulky fragments in this style belong to capacious askoi, deep basins, water jars, and small pithoi, no whole example of which could be put together. When the surfaces to be covered were so extensive, the limitation of the painted area to the upper half of the vessel no doubt effected considerable economy in the amount of glaze used and time and labor required; and perhaps this class of partially coated large vases — not so much the smaller pots with only a brush line along the rim — owes its origin to motives of this nature.

II. *Completely Coated Ware.*

The fabric is essentially the same as that of Class BI, though in the majority of examples slightly better finished. This class includes all those Early Helladic pots which have their exterior covered with a plain coat of paint. The paint is really a glaze which varies widely in quality from vase to vase. On early specimens it is a fine, hard, lustrous coating of a very durable character (PLATE VII, No. 577); on others, though not lacking in lustre, it is far from permanent and has flaked off to a greater or less extent, exposing the surface of the vase beneath; and finally, in many cases, it is a careless wash, not at all uniform in thickness, which often preserves only the faintest traces of its original lustre. On almost all these latter vases fine brushmarks are everywhere easily distinguishable, showing that the paint was applied by means of a rather delicate fine brush, probably of hair. The marks in some instances seem to indicate a brush *ca.* 0.025 m. wide.

1. Shallow bowls or saucers are very common, but by no means so frequent as in the partly coated style. Apart from quantities of fragments, a dozen complete examples were found, ten of which have a raised base (Fig. 75).¹ Two, which are extremely shallow, merely have their bottoms flattened (one is illustrated in Fig. 76, No. 270).² The raised base is usually a crude affair, a separately moulded ring of clay applied to the bottom of the bowl before firing; which is indeed the usual Early Helladic technique in making bases. The profile of these bowls is generally a simple curve, commencing at the base and ending in a rolled rim, but sometimes there is an angle at the shoulder and the rim rises in a curve of the opposite direction (No. 387, Fig. 76).³ The fabric is usually better than in the partially coated class and there is not so much distortion of the shape in the firing.

2. A hemispherical lid, in shape very much like the preceding bowls inverted, was found in the House of the Pithoi (No. 101, Fig. 76).⁴ It has a thick loop handle at the top, broken but restored in plaster.

3. A good many fragments of pyxides were found, but in only one case sufficient to restore a small example; and even here the base and part of one side are lacking (No. 261, Fig. 77).⁵ It has a rather globular shape with an extremely small mouth (diameter 0.026 m.; diameter of the pot, 0.105 m.; height, *ca.* 0.073 m.). On either side low down, at the level of the rather sharp angle formed by the two curves of the profile of the body, is a long horizontal lug pierced vertically by a small hole near each end. A low plain vertical rim around the opening looks as if it were intended to be closed with a tightly fitting lid, which was probably tied on by a string passed through the holes in the lugs.

A fragment of such a lid for a somewhat larger pyxis was found in House L (No. 570,

¹ Shallow bowls: No. 290. Ht. 0.073 m.; D. 0.135 m.; D. of base, 0.039 m. Grayish buff clay; thin brownish wash outside, mottled red and black glaze inside; slightly lustrous.

No. 398. Ht. 0.083 m.; D. 0.157 m.; D. of base, 0.048 m. Greenish buff clay, good black glaze, fairly lustrous, crackled surface.

No. 390. Ht. 0.051 m.; D. 0.113 m.; D. of base, 0.055 m. Pinkish buff clay, good red glaze with black mottling, inside and outside.

² No. 270. Ht. 0.04 m.; D. 0.147 m. Brick-red clay and wash of same color.

³ No. 387. Ht. 0.076 m.; D. *ca.* 0.128 m.; D. of base, 0.048 m. Greenish buff clay, poor black glaze. Ht. of recurved rim, 0.02 m.

⁴ No. 101. Ht. (without handle) 0.065 m.; D. *ca.* 0.15 m. Gray clay (burned); mottled red and black glaze.

⁵ No. 261. Brick-red clay — glaze of same color — slight lustre.

Fig. 77).¹ It is of circular shape with the edge turned over sharply to fit around the rim. On the top is a long lug with two string holes corresponding exactly to the type on our pyxis. The lid from House L is actually of the polished yellow mottled ware described above, but similar examples in the glazed style occurred.

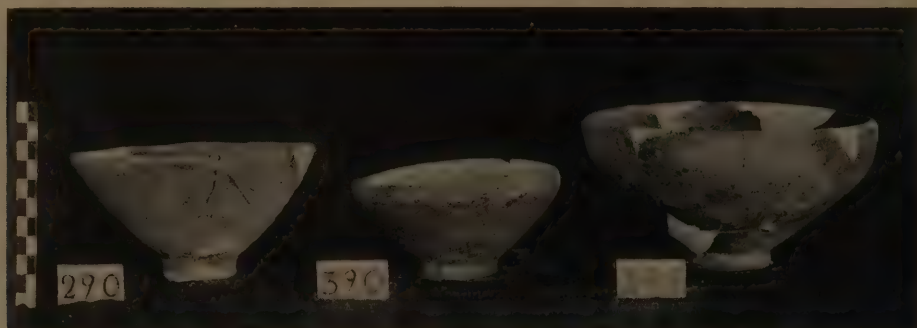


FIGURE 75. THREE SHALLOW BOWLS, EARLY HELLADIC WARE, CLASS B II

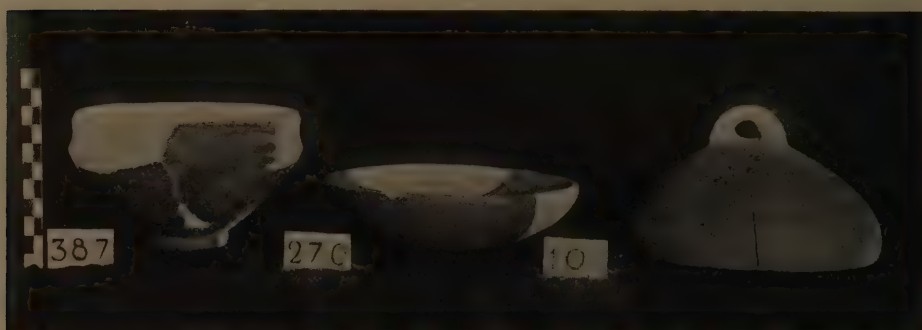


FIGURE 76. THREE SMALL POTS, EARLY HELLADIC WARE, CLASS B II

The pyxis itself is pretty well made with thin walls. The smooth surface was coated with thin reddish brown paint, which here and there shows traces of mottling.

4. The sauceboat is certainly one of the most characteristic shapes of the Early Helladic Period (occurring in no other) and, to judge by the great number of fragments found, must have been a great popular favorite. Shattered pieces of spouts or of the distinctively curved rims came to light in enormous quantities everywhere in the settlement. From this

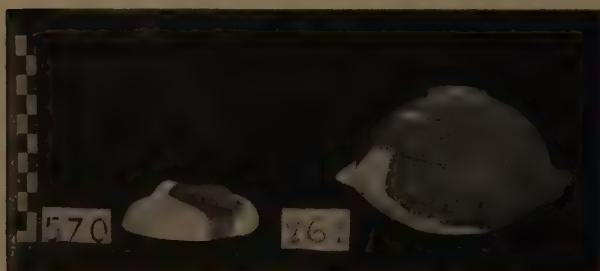


FIGURE 77. LID (CLASS A II), AND PYXIS (CLASS B II), EARLY HELLADIC WARE

material it proved possible to put together in varying degrees of completeness some thirty specimens which illustrate adequately the wide range of styles employed. Broad spouts, narrow spouts, high, low, shallow, deep spouts with widely flaring rim, and others with plain modest lip, all are well represented. In

¹ No. 570. Ht. (including lug) 0.025 m.; D. ca. 0.073 m. Brick-red clay, smooth cream slip.

size these vessels range from a diminutive pot, 0.05 m. high, to a capacious example with a height of 0.175 m. (0.255 m. at the tip of the spout) large enough to hold nearly a gallon. A horizontal loop handle, not very strong, attached just below the rim at a point opposite the spout is customary, but vertical handles also occur, especially in the case of the better fabrics. In all cases where the bottom is preserved, these sauceboats are provided with a raised base.

The quality of the ware varies greatly. Some specimens are of gross execution, made of little-purified clay, with thick, soft, crumbling biscuit, and with a roughly finished surface over which poor glaze has been carelessly smeared. Others have been manufactured with



FIGURE 78. SAUCEBOAT, EARLY HELLADIC WARE, CLASS B II

precision and attention, carefully refined in shape, with slender walls made of well-levigated paste, sufficiently fired so that the biscuit is hard and firm, with surface smoothly finished and covered with good lustrous glaze. These vases are usually coated both inside and outside, but in many examples the interior has been left unpainted except for a brush line along the rim.

The specific purpose of vases so peculiar in shape as these is not perfectly clear. It has been suggested that they were lamps and that the long projecting spout was intended to hold the wick. This theory does not seem very likely, however, for no trace of burning or blackening has been observed at the end of the spout, such as is of frequent occurrence on Greek and Roman lamps, and is indeed inevitable if a lamp be much used. Furthermore, the huge size and depth of many examples seem quite irreconcilable with such a purpose. The spout in most cases seems clearly made for pouring liquids. In spite of its evident popularity, the sauceboat cannot be described as a practical shape. The long heavy spout makes the balance precarious; when full the vessel naturally stood more firmly than when empty, but it seems likely that the milk was often spilled in Early Helladic houses.

Since vases of this type have not heretofore been very fully published, it may be worth while to give a description of some selected specimens.

No. 226, Fig. 78. Height at middle of side, 0.175 m.; at end of spout, 0.255 m.; transverse diameter, 0.175 m.; extreme length (handle to end of spout), 0.265 m.; diameter of base, 0.072 m. Put together from fifty-seven fragments found just outside House L. Missing: two small bits of rim and the tip of one side of the spout. This, the largest example found at Zygouries, is fairly well made, of light buff clay not meticulously sifted. The firing was not of the most perfect. The vessel was finished with a good slip, over which it originally had a coat of reddish brown glaze which has now practically all disappeared. A relatively small

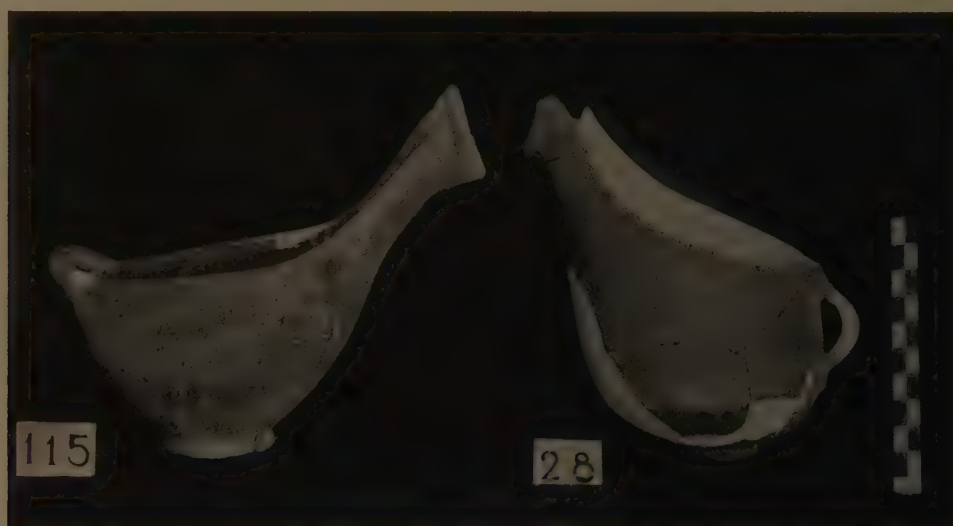


FIGURE 79. TWO SAUCEBOATS, EARLY HELLADIC WARE, CLASS B II

horizontal handle is somewhat clumsily attached opposite the spout just below the rim, but is not placed accurately in the long axis of the pot, which gives a lopsided effect. The fairly short, broad, flaring spout is set at a moderate angle of elevation. The under side of the spout is not smoothly modelled.

No. 115, Fig. 79. Height, 0.077 m., and at end of spout, 0.143 m.; diameter, 0.094 m.; length, including handle, 0.182 m.; diameter of base, 0.046 m. Only two small chips of the rim missing. Light buff clay. A well-made pot, found in House Y, almost symmetrical, with thin firm walls, it has a raised base, a horizontal loop handle, and a long narrow spout flaring out at the end with high-pointed tips. The spout, the under side of which is rather rough, has a much greater rise from the rim than that of No. 226. The vase is coated inside mainly with black, outside with red glaze, which has worn away in spots. A small space under the handle is unpainted. A large patch of black on one side and a small one on the other provide a mottled variation of color.

No. 24, Fig. 80. Height, 0.13 m., and at end of spout, 0.222 m.; diameter, 0.118 m.; length, *ca.* 0.195 m.; diameter of base, 0.058 m. Forward part and base preserved; rear part and handle restored in plaster. Well made, with rather sure lines, this pot has thin walls, smoothly finished, and is about as symmetrical as is possible for a vessel of the sauceboat

shape. It has a long, narrow, deep spout with a wide flare at its high-tipped end (the tip on one side has been restored). The spout is set at a steeply ascending angle; its under side is slightly rough, almost corrugated, one might say. The vase is made of greenish yellow clay of a fine grade. The smoothly slipped surface was originally coated with a uniform heavy, black glaze, inside and out. It has worn badly, but where it survives still preserves a good lustre.

No. 28, Fig. 79. Height, 0.092 m., and at end of spout, *ca.* 0.15 m.; diameter, *ca.* 0.082 m.; length, *ca.* 0.122 m.; diameter of base, 0.037 m. Missing: one side, a long narrow splinter from the lower part of the other, the extremity of both tips of the spout, and most of the handle. The whole body slopes steeply upward toward the spout; the latter, which had



FIGURE 80. TWO SAUCEBOATS, EARLY HELLADIC WARE, CLASS B II

moderate tips, is sharply rolled at the end. The pot, made with thin walls, has a low belly, curving in abruptly to the small raised base. The broad, flat, vertical handle is divided by a groove down the middle. This is good fabric, resembling the polished yellow mottled ware described above (p. 79). The clay, gray at the core, light brick-red at the surface, is firm and shows that the pot was well fired. The surface was coated, over a smooth slip, with a dark glaze, thin on the inside, but thicker and almost uniform on the exterior, although it has now been rubbed off in spots. The vase has a mottled finish: the lower portion is almost bluish black, set off by an irregular orange-buff line running around the body, while the upper part is gray, shading off toward the top.

No. 320, Fig. 80. Height, 0.052 m., and at end of spout, 0.079 m.; diameter, 0.065 m.; diameter of slightly raised base, 0.025 m. Rear portion and handle missing. In this, one of the smallest sauceboats found at Zygouries, the broad shallow spout, which has no raised tips, is set at a very moderate upward angle. The clay, which in color is light buff throughout, is of finely sifted texture. The exterior is somewhat rough, and the whole front, from the end of the spout down, presents a slightly corrugated surface, a phenomenon which may be observed on a great many sauceboats: no doubt the traces of the process by which the spout was worked into its final form. A coat of brownish black glaze, still retaining some of its

lustre, though now much rubbed off on one side, covers the vase; the interior is unpainted except for a narrow band along the rim.

No. 569, Fig. 81. Two fragments of a sauceboat of good fabric, similar to No. 226 in shape, though much smaller. Pinkish buff clay. It was originally slipped and coated with lustrous reddish brown glaze, which has worn badly. The chief interest of the fragment lies in its incised or impressed decoration. Two parallel horizontal lines close together, made by a succession of oval impressions, form a belt around the vase; from this band a group of four similar parallel lines extends upward along the under side of the spout; and at irregular intervals around the body, groups of three parallel lines in the same technique



FIGURE 81. FRAGMENTS OF A SAUCEBOAT WITH INCISED DECORATION, EARLY HELLADIC WARE, CLASS B II, No. 569

run up to the rim. There were probably three such groups on each side between the handle and the spout. No trace of pigment appeared in the impressions.

No. 260, PLATE X. Height 0.061 m.; at end of spout, 0.10 m.; diameter, 0.079 m.; length, *ca.* 0.136 m. Preserved are the front with the spout, and the rear portion with the handle and part of the base; the missing parts have been restored in plaster. The shape is fairly low, and the spout is not extremely elevated. The pot has the usual raised base (*ca.* 0.033 m. in diameter) and horizontal handle. Its unusual feature is the spout, which has its end pinched out into a crudely formed ram's head. The snout is long and thin; the eyes are made plastically by large applied pellets of clay; the horns, springing from the top of the head, curve down around the eyes on each side and project forward and upward beyond the line of the snout. The fabric is rather crude, though the shape of the pot is pretty regular and the walls are fairly thin. The clay is a greenish gray right through and is not fired to a durable hard-

ness. The surface was brushed smooth and coated originally with black glaze which has almost completely vanished; where preserved it still shows some lustre. This curious sauceboat would be unique were it not for the following counterpart.

No. 251, PLATE X. Height, 0.07 m.; at end of spout, 0.117 m.; diameter, *ca.* 0.076 m.; length, with handle, 0.115 m. Reconstructed from seventeen fragments found on the floor of the House of the Pithoi; only three splinters are missing. It is relatively thick and heavy and rather crudely made; has the customary raised base (diameter, 0.032 m.) and a badly formed thick lopsided horizontal handle. The body, which was much distorted by warping and exhibits no symmetry, curves upward somewhat steeply toward the spout. The latter is pinched out at its end in the same fashion as in the preceding example and rudely shaped to represent a ram's head. The snout is slender and more abbreviated than that of No. 260; the horns, curved in the same way, are thicker and shorter and meet across the bridge of the snout. There are no eyes. The clay is gray at the core, brick-red at the surface, and its consistency indicates thorough baking. The surface is fairly smooth and is coated inside and out with a thin reddish brown glaze, shading to darker hues in a lightly mottled effect.

No. 577, PLATE VII. Fragment, the forepart of a large sauceboat, height, *ca.* 0.155 m.; diameter, 0.184 m. Missing: end of spout, and all of rear portion of the vessel, including the base and the handle. The pot is of good fabric, made of well-purified buff-colored clay, containing some particles of yellow mica; it is coated inside and out with lustrous glaze of excellent quality which has been somewhat damaged. In spite of its incomplete condition, it is shown here to illustrate the possibilities of the mottled technique, for here it was unquestionably managed so as to produce a design. The lower part of the pot from the base upward is orange-red in color and the area in this tint has somehow been given a stellate shape with five or six points (only three of which are preserved), not regularly spaced, directed upward, one point following roughly the axis of the spout. Above this is a zone of black, which really forms the background for the star. On its upper side this zone is bordered by a band of purplish red of varying width which, starting fairly low at the back (*i.e.* below the handle), runs around the pot, rising gradually until, reaching the line of the spout, it curves more sharply upward from each side to form a pointed angle. Above this band is a further broad expanse of black background, which, as it approaches the rim, shades into a large and rather shapeless mass of purplish red on each side of the vase. The glaze, which is all the same — there is no question here of different pigments — is everywhere badly crackled and not a little has been lost by flaking, but the effect of this rather bold mottled pattern is nevertheless a striking one.

5. Beneath the floor of the large room in the House of the Pithoi was found a fragment of a pot of remarkable shape (No. 238, PLATE X). It seems to have been a jug with a broad squat body and a tall cylindrical neck, the top of which is finished almost in the form of a small sauceboat. Practically the whole of the body and the wide flat handle are missing. The neck, which has a diameter of *ca.* 0.056 m., rises 0.165 m. above the body (measured at the middle of the side; to the top of the spout 0.22 m.). It widens out at the top and the line of the rim is carried along on each side in a symmetrical rising curve to the tips of the projecting spout. This latter is fairly deep, flares slightly toward its end, and has a gently rolled edge.

The attachment of the handle both at its lower and upper end is preserved, in the latter case with a small bit of the handle itself. At this point a row of rivet heads seems to have been imitated by small applied pellets of clay, circular in shape, only one of which now survives. On the inside of the mouth, close to the rim and almost corresponding to the junction of the handle and the neck, is a simple plastic decoration. A narrow strip of clay has been attached here in the form of a curving U, with a rivet head, again represented in the same way, on either side.

It is clear that in this oddly shaped vessel we have very active reminiscences of work in metal. This might seem rather startling in view of the early period with which we are dealing; but the progress of research and exploration in recent years has been gradually revealing unsuspected abilities and capacities on the part of Early Helladic craftsmen in other fields than that of pottery; and we must admit the possibility of far more pretentious achievements in metal working than have heretofore been known. The well-formed dagger described in Chapter V is an indication; and the gold sauceboat in the Louvre, published by Childe (*J. H. S.*, 44, 1924, pp. 163-5), opens up a new view.

The high-necked jug we have been describing is of good firm fabric and had its exterior coated with a uniform black glaze of excellent quality. A vertical patch beneath the handle, not easy to reach satisfactorily with a brush, and the interior of the mouth were left unpainted. Some of the glaze on the neck has been rubbed off, exposing the bare surface of the pot, on which here and there, as well as in the light buff biscuit which appears in the fractures, a few yellowish particles of mica may be seen. Mica, even in scanty quantity, is so rare in the clay of which the vases from Zygouries were made that one is led to wonder if we have to do in the present case with an imported piece.

6. From the number of sherds found in the house deposits, large askoi seem to have been fairly common. The fragments were usually widely scattered, however, and it was not possible to put together so many complete specimens in proportion to those of other shapes as the number of broken pieces indicated. The capacious askos illustrated in Figure 82 was restored from 101 fragments found on the floor of the House of the Snailshells — a veritable triumph of mending — and is practically complete. It is a typical representative of its shape and for that reason deserves a brief description.

No. 35, Fig. 82. Height, 0.22 m.; diameter, 0.217 m.; length, 0.205 m. The flattened bottom makes a fairly stable base. The body is low and squat with the characteristic oblique upward slope toward the spout. The front of the body forms a continuous broad curve, extending from the base to the rim, slightly flattened out in its upper part, where it also serves as neck. On the opposite side the neck rises at a sharp angle from the body to a vertical height of 0.048 m. The mouth is roughly oval, with its front or pouring side straightened; it measures 0.127 m. from side to side, 0.09 m. from front to back. A broad flat handle, springing from the rim, curves outward and swings down to the body; at its narrowest point, just after leaving the rim, it has a width of 0.042 m.; at its widest, where it joins the body, 0.065 m. The pot is not of very durable fabric. The clay, which is of a buff tone right through, and contains many particles of grit, is very soft and rubs away almost like chalk. The surface was smooth and coated all over with red glaze, practically all of which has now disappeared; the inner side of the neck was similarly painted.

No. 295, Fig. 83.¹ Upper part of a similar askos from House L. The base is missing and has been restored in plaster. This example is somewhat better made than the preceding, and is, especially, more adequately baked. It illustrates well the variation permitted in this shape too; for the askos, like the sauceboat, seems to occur in many different forms. Its flat handle, narrower, shorter and more sharply curved than that of No. 35, is divided by a groove down the middle (in some other examples two such grooves make a tripartite division). The profile of the front does not follow a single curve from base to rim; it reaches a distinctly emphasized neck which rises almost vertically to the rim (0.038 m. high opposite the handle). The mouth is almost a regular ellipse, measuring 0.115 m. from front



FIGURE 82. LARGE ASKOS, EARLY HELLADIC WARE,
CLASS B II



FIGURE 83. ASKOS, EARLY HELLADIC WARE,
CLASS B II

to back and 0.165 m. from side to side. The rim on either side of the handle slopes gradually upward until near the line of the major axis of the ellipse it forms a slight angle and continues horizontally.

The vase is covered with reddish brown paint, not a uniform coat in thickness; the space beneath the handle is not painted, and the band along the inside of the rim is rather narrow. Fine brush marks are particularly noticeable in this thin glaze, which still retains some lustre.

A small example of an askos from House Y lacked only its rim and handle; no other specimens at all approaching completeness were found, but, as remarked above, handles and pieces of rims were common on the floors of the houses.

These vases, with their curiously formed bodies drawn out to what is really an unwieldy spout at one side, are closely akin to the sauceboats, and like the latter are a distinctively Early Helladic type which is not met in other periods. Again the particular use to which they were put is problematical. Small examples would serve well as a sort of scoop to draw

¹ No. 295. Ht. as restored, 0.202 m.; D. front to back, 0.207 m.; side to side, 0.205 m. Brick-red clay changing to buff at surface.

liquids or meal or grain from larger receptacles, but askoi with the dimensions of No. 35 must have been somewhat ponderous for such purposes, and one may wonder if the long and rather thin, though broad, handles were sturdy enough. For use as a container the shape also seems awkward, since the overweighting of one side must have made the equilibrium very insecure, especially when the flattened base had been carelessly finished.

7. Jugs with a short or long neck and spout seem to have been used very generally in the settlement, but no complete example of this class (B II) was recovered. Presumably they were not much different in shape from those of Class B I, though they appear as a rule to have been smaller and somewhat better made. Among the early wares from the deep

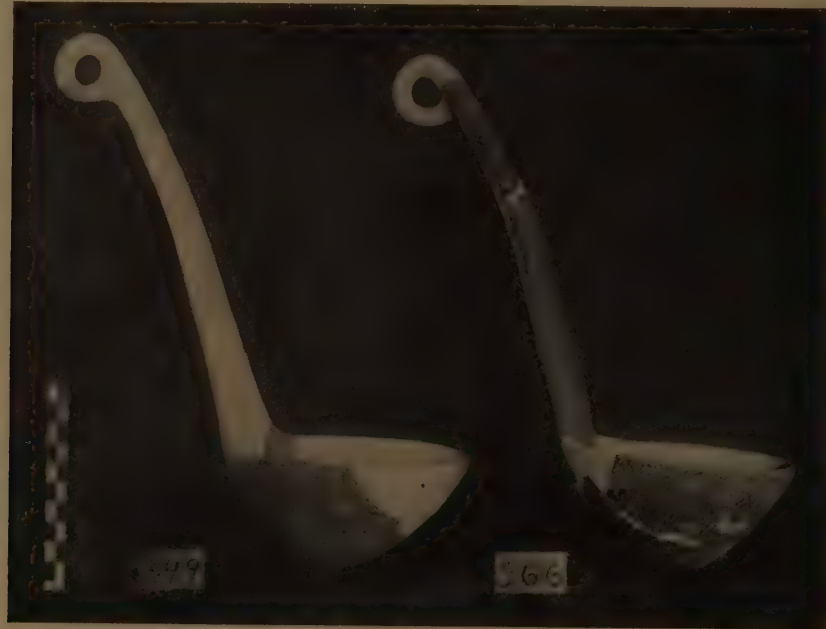


FIGURE 84. TWO DIPPERS, EARLY HELLADIC WARE, CLASS B II

trench west of the hill are a few handsome specimens of long necks, covered with a rich red glaze (PLATE VIII, No. 9), which could hardly belong to any other shape than a jug. Below the floor of the House of the Snailshells was found a small jug with a squat body; the neck was missing and there was only one fragment of the spout, which, however, indicated that the latter was broad and shallow. The body was coated with thin reddish glaze, slightly mottled in the firing.

8. A good many fragments of necks and handles were found, evidently from large jars similar to those from Korakou (*Korakou*, p. 8, Fig. 8), something like the later hydria in shape. Some of them were certainly of impressive size, but all had been shattered, and the fragments were so scattered that no reconstruction was possible.

9. Among the mass of sherds from the cuttings brought to light in the west scarp of the hill (which, as we have seen, were probably the bottoms of *bothroi*), were fragments of at least a dozen large "dippers," and a few shattered bits of similar vessels occurred in other places about the settlement, especially in the fill under the floors (from which it appears

that we are dealing with a fairly early shape). It is a sort of circular cup of no great size, narrowing gradually to a small rounded bottom; depth *ca.* 0.05 m. or 0.06 m.; diameter roughly twice that. The wall is much thickened on one side, and from this there springs upward a long massive handle, the extreme end of which is curled back and around to form a loop or ring. Several examples of these handles had a length of *ca.* 0.24 m. At the loop end they are fairly slender and circular in cross section, but as they approach the rim they grow broader and thicker. These dippers are well made: the biscuit is usually a pinkish buff in color and has been well fired; the surface is covered with glaze, in some cases red, in others black, and always of pretty good quality, often still preserving a fine lustre. Mottling is



FIGURE 85. DEEP BASIN, EARLY HELLADIC WARE, CLASS B II, No. 606

common. It was not possible to put together a single specimen complete; two restored in plaster are, however, shown in Figure 84.¹ In one of these the handle was altogether missing; in the other the handle is original and belongs to the vase, but does not actually join the preserved part of the cup; the restoration is nevertheless in both cases certain. The ring at the end of the handle was undoubtedly intended for hanging the dipper on a nail or peg, as the rounded bottom would not allow the vessel to be set down conveniently.

10. Basins, deep and shallow, and ranging in size from small examples to huge vessels of great capacity, were common in the settlement, and the best are executed in the completely glazed technique. The choicest of all belong to the earlier style from the *bothroi* in Trial Trench I, showing a hard well-fired fabric, finished to a smooth surface, and covered with a thick coat of excellent glaze inside and out. The smoothing of the surface seems to

¹ No. 399. Buff clay; good reddish brown glaze, but badly worn off.

No. 566. Pinkish buff clay; excellent red glaze, shading to reddish brown at top of handle; patch of black mottling on exterior of cup.

have been done with a fairly coarse, stiff brush which has left distinct lines; there are no traces of the use of the wheel. The color is red in some cases, frequently black, and mottling is usual.

Circular in shape, these vessels are very regularly formed, with sides spreading in a uniform curve from a small base to a thick flat rim which generally has a sharp edge toward the interior. In several examples the bottom is merely flattened as a base, usually resting only on an outer ring, the central part being pushed up or hollowed out. Broad strap handles, forming a very small loop and set close to the rim, are typical; large vessels seem to have had four of them symmetrically spaced. Often there are lugs instead of handles, sometimes apparently more for looks than for use. Occasionally a raised band with thumb

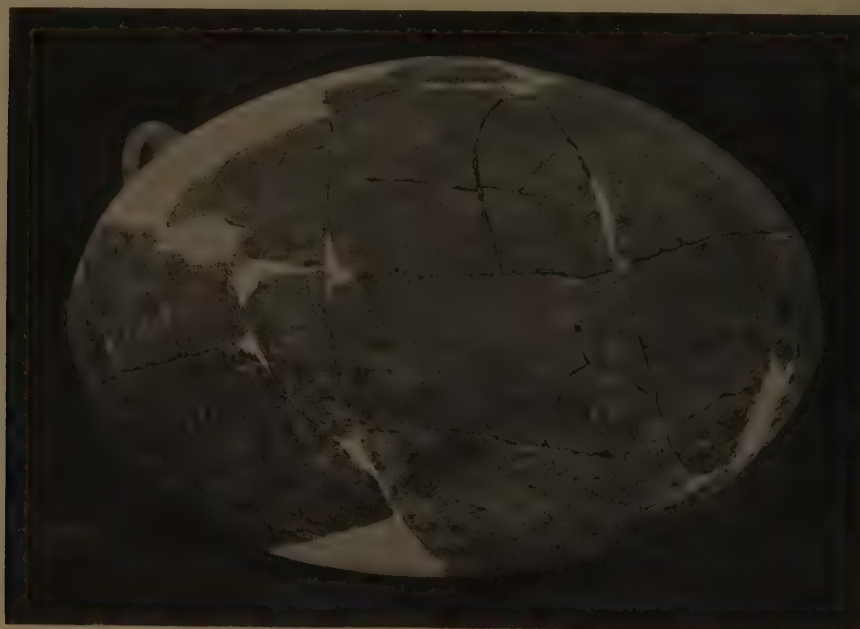


FIGURE 86. FLATTENED SPHERICAL VESSEL, EARLY HELLADIC WARE,
CLASS B II, No. 33

impressions makes a sort of rope pattern running around the vase just below the rim. No whole example of these basins came to light; the most nearly complete, which has been restored in plaster, had a diameter of *ca.* 0.55 m. and a height of *ca.* 0.31 m. (No. 606, Fig. 85).¹

No. 33, Fig. 86. Height, 0.176 m.; diameter, 0.26 m. A flattened spherical vessel, probably a jug of some kind, with a flat base, *ca.* 0.11 m. in diameter. It is made of greenish buff clay and is well fired. The surface is coated with a thin, lustrous, brownish black glaze, partly worn off in some places, in which the brush marks are very noticeable. The roughness of the interior surface near the top indicates that something was originally attached here; it was probably a spout, but it could not have been of large size. Whatever it was, it was not symmetrically placed at the top of the body, and the effect must have been distinctly lop-

¹ No. 606. Ht. 0.31 m.; D. 0.55 m. Clay gray at core, pink at surface; coated with good black glaze, with reddish brown mottling here and there.

sided. The vessel has one small handle, like an ordinary horizontal loop handle, but set vertically, though badly askew, high up on the body. It is a very puzzling piece.

Pots of other shapes than those described above certainly occurred in the settlement (pithoi will be discussed in section E below), and some may not have been especially rare; but this list undoubtedly includes all that were common and characteristic, and it may be concluded with the description of a large deep bowl found on the floor of the chief room of the House of the Pithoi.



FIGURE 87. BOWL WITH SPOUT, EARLY HELLADIC WARE, CLASS B II, No. 276

No. 276, Fig. 87.¹ Missing: base, much of the lower part, one handle, part of the other, and the tips of the spout; the entire rim is preserved with the exception of a small splinter. This is a capacious circular bowl *ca.* 0.20 m. high, with a diameter of *ca.* 0.285 m. The body rises in a slightly swelling curve from the base to a distinctly angular shoulder, then continues in another curve to the neck, where it terminates in a flat broad rim splaying outward at a sharp angle. This rim is 0.02 m. wide. Two thick horizontal loop handles are set opposite each other at the angle of the body, and roughly in the axis perpendicular to them there is a relatively small, but broadly flaring spout, bridged by the rim. The spout projects *ca.* 0.05 m. from the body.

Just below the rim and diametrically opposite the spout on the exterior face of the upper zone an applied strip of clay formed a simple decoration; part of it is now missing, but the

¹ No. 276. Clay gray at core, brick-red at surface; fairly well levigated.

traces of the original attachment are clear. It was merely a sharply curved line the two ends of which were extended in a sweeping curve to right and left, resulting in an ornament very similar to that on the interior of the neck of the spouted jug described above (No. 238, PLATE X), though here turned the other way up. There are no rivet heads. Plastic decoration of this general type is not rare on Early Helladic pots; many fragments were found bearing remains of similar raised bands.

Our bowl is a very well-made vessel. There is a metallic look about the shape, appearing especially in the angular profile and in the flat rim. The walls are pretty uniform and thin for a pot of this size, though there is no evidence of its having been thrown on a wheel; and the rim is remarkably regular. The surface was finished smoothly and covered with good red paint, still lustrous, though some of it has been worn away.

As stated above, the period during which this glazed ware continued to be used was certainly an extended one, and a considerable change or development in the fabric may be recognized. The evidence from Zygouries corresponds closely with that from Korakou and seems to be convincing.

The earliest material is undoubtedly that from the deep pits south and west of the hill and from the *bothros* deposit in the west scarp. Here glazed ware was found associated with polished fabrics, and indeed in a few rare instances vases with a heavily polished exterior had their interior coated with paint. This glaze, as a rule, is a thick, firm coat of rich color, red being much more frequent than black, though red and black mottling is common, and black alone is by no means rare. The glaze is often crackled, but clings tenaciously to the vase; it regularly has a noticeable sheen. Practically no examples of this type were found throughout the settlement. Representative specimens, sherds, are shown in PLATE VIII.

A second stage is almost surely represented by the material from the trenches dug through the floors in the central part of the hill; that is, in deposits which were certainly laid down before the houses of our settlement were constructed. Here, though much of the ware approaches closely that discovered everywhere among the houses, a significant number of specimens came to light closely similar to the early glazed ware from the pits. They are coated with good uniform paint, generally well preserved and exhibiting a distinct lustre. As examples may be mentioned the high neck, with spout almost in the form of a sauceboat, from beneath the floor of the House of the Pithoi (No. 238, PLATE X) and the sauceboat with the mottled pattern from the trench dug through the floor of the House of the Snailshells (No. 577, PLATE VII, No. 2). The glaze on these specimens is more often black than red, though the latter occurs; mottling is still common, but whereas on the earlier ware it is effected by means of black patches on the red ground, the method is now reversed, and the result is produced by red patches on the black ground.

A third stage, finally, is exemplified by the pottery found everywhere about the settlement, and it is of course to this phase that the bulk of the Early Helladic ware from Zygouries belongs. The average pot is covered with a careless wash, hastily applied in a thin uneven coat, in a color usually an indeterminate brownish black, frequently devoid of almost every trace of lustre. Vases of better quality certainly do occur, and many were found, the glaze of which still merits the name; and that potters were able to achieve extraordinary delicacy in their work is shown by some of the fine specimens of the polished

yellow mottled ware (p. 79), which is unquestionably a contemporary product. But they were apparently very chary of expending their skill on ordinary everyday pots.

The partly coated style is also at home in this stage. It might be thought that this class illustrates the development of the glaze technique, supposedly originating first as a band of paint along the rim to facilitate the pouring of liquids from vessels of porous clay, then gradually spreading so as to cover the whole pot. This explanation sounds reasonable enough as a theory. But no example of the partly coated style was found in the deep pits at Zygouries, and it was not abundant under the floors of the houses; in fact it is clearly a late arrival and only becomes abundant in the houses themselves. So it seems much more likely that this ware represents the end of a development rather than the beginning and is actually the penultimate step in the degeneration of the glaze technique (for the final step, see p. 110 below).

Certain differences in shape appear to accompany these changes in the character of the glaze. In the deep pits flat bases were the rule for small pots as well as large, though raised bases also occurred. In the deposits beneath the floors the latter had become regular, and in the settlement they are practically universal, though for large pots such as jugs, jars, and askoi, flattened bottoms are still customary.

Few sauceboats were represented among the fragments from the deep pits, but in the deposits under the pavements they were common, and on the floors of the houses abundant. Large dippers of a characteristic type were fairly numerous in the deep pits and in the *bothroi*; a few handles of the same kind came to light among the remains of the second stage, especially from the deeper levels in Trench V, but the shape is practically non-existent in the settlement, where its place is taken by smaller unpainted ladles (p. 108). Shallow bowls seem to have been equally popular in all three phases, but have a much more carefully formed profile in the earliest stage, with a rim rolled over in a stronger and more finished manner. In the earlier ware, in general, the lines of the pot are sharper and seem made with à sure hand; in the later ware they are careless and crude. Metallic-looking strap handles with their edges turned were found in some numbers in the pits, but were rare in the settlement. Possibly some of this early ware was manufactured in careful imitation of metallic prototypes; later metal itself perhaps became more common, though we still have very scanty evidence in this field, and there was no longer so great a demand for studious imitations. The decline in the glaze technique may merely mean that the ambitious efforts of the handicraftsmen were directed into other channels.

In summary, before we go on to the next group of Early Helladic ware, I think we may say we have evidence for three phases in a gradual evolution, or rather deterioration, in the glaze technique. The early red glaze, perhaps through the influence of the mottled style, gives way to black, and this in turn degenerates into a poor brownish black wash; but there are no sharp dividing lines, and the whole process is one of slow, gradual transition.

C. PATTERNED WARE

Patterned ware was comparatively rare at Zygouries, but scattered sherds were found here and there throughout the settlement, and a few came from the deposits under the floors of the houses. The greater number were unearthed in the central part of the hill



FIGURE 88. EARLY HELLADIC PATTERNED WARE, CLASS C I

and allowed the restoration of four vases, a fifth being found intact and a sixth practically so. These pots merit illustration here, since they add to the meagre assortment of Early Helladic patterned ware available in publication and offer new types. Some of the best material was undoubtedly among the shattered fragments too small to give complete patterns or even in some cases the shapes of the vases to which they had belonged. A number of the most interesting pieces will be found in Figure 88 and PLATE XI. This ware falls clearly into the classification worked out on the basis of the discoveries at Korakou, presenting good examples of the two styles of Class I, in which dark patterns were employed on a light ground. No more than half a dozen specimens of Class II, with light decoration on a dark ground, were discovered.

I. Decoration in dark color on a light ground.

(a) Pattern limited to a narrow zone or zones reserved when the rest of the vase was coated with glaze.

NO. 114, PLATE XII, No. 1.¹ Upper part of a somewhat squat jug, with narrow neck splaying to a wider mouth; the lower half of the pot, including the base, is missing. Greatest diameter, *ca.* 0.105 m. The jug probably had a small loop handle similar to that on early Mycenaean (Late Helladic I and II) vessels of approximately the same shape (*Korakou*, p. 53, Fig. 71). The lower half of the body (as shown by the very scanty remnant still preserved) and the neck were coated with thin glaze, the zone between being reserved for decoration. This zone is divided into an upper and a lower belt by two parallel lines which run around the pot. In the lower a pair of lines connected by numerous cross lines forms a simple zigzag; in the upper belt is a band of double triangles, one inside the other, the inner of which is shaded by cross-hatching. And finally along the inside of the rim we have again two parallel lines, joined by oblique cross lines close together. Altogether it is a very simple linear decoration carried out in the same brownish black paint which covers the upper and lower parts of the vase. This paint is very thin and has only the slightest lustre. The surface of the pot is smooth and bears a cream-colored slip; much of it has apparently flaked off in splinters, due to the effect of fire.

PLATE XIII, No. 2. A fragmentary tankard from Trench VI; only part of one side is preserved and the vessel has been restored only in the drawing by Mr. De Jong. It is made of a fine pinkish buff clay which has turned gray at the core; the surface is covered with a powdery buff slip, worn away here and there. The tankard has a widely splaying rim; near the bottom the side forms a fairly sharp angle, where the broad body contracts abruptly toward the base; the base itself is missing.

A smooth coat of good reddish brown glaze covers the upper and the lower part of the body, an uncoated (but slipped) zone being left around the middle. On this zone, with the buff slip as a background, is painted a linear pattern consisting of a horizontal band of fine overlapping chevrons, and framed above and below by four horizontal lines. The handle is marked merely by four parallel vertical lines.

(b) Open or free style.

¹ No. 114. Fine grayish buff clay, changing to pink at the surface. Much damaged by fire, which has caused the surface to flake and splinter off.

The whole surface of the vase is left open for decoration, which is, however, often arranged in belts similar to those we have seen in Class (a). Most of the examples of patterned ware from Zygouries belong to this style.

No. 113, PLATE XIII, No. 1.¹ Fragment of a tankard preserving a little more than half of the side and rim, together with one handle; the base is missing. Its greatest diameter is 0.129 m. The pot is finished with a good slip on which it carries three zones of decoration in lustrous reddish paint. The pattern is extremely simple, consisting in each case of three parallel lines, the upper and lower group being characterized by short oblique dashes projecting from the top line. The handle is marked by an irregular zigzag in the same style, formed in its lowest step of four parallel lines, which are succeeded by three in the second



FIGURE 89. SMALL POT WITH SPOUT AND BASKET HANDLE, EARLY HELLADIC PATTERNED WARE, CLASS C I, No. 8

and third steps. Along the inside of the rim are three parallel lines, from the upper of which small diamonds in solid color project toward the lip. The surface of this pot is much damaged, and the paint has been partly rubbed off.

No. 8, Fig. 89.² A rather poorly made small pot with a basket handle and with a tubular spout projecting from the middle of one side. The handle, which was broken away, has been restored in plaster. The pot is thick and heavy, with a slipped, but far from smooth, surface. Below the attachment of the handle at the back is an irregular swelling which may be a crude attempt to imitate a rivet head, or may mean that the handle was ridged (but there is no corresponding swelling at the front). The bottom of the vessel is flattened as a base with a concavity at its centre. The body is inclined toward the globular in shape with an angle at the neck and a slightly splaying rim. It is decorated with large dots not uniform in shape and very irregularly spaced. Perhaps the intention was to arrange them in three more or less horizontal rows running around the pot; if so the scheme became confused at the back, and only two rows appear on the side opposite that shown in our figure. Dots were painted also on the bottom of the vase and on the spout. The paint is worn and crackled and shows very little lustre. A few particles of mica may be distinguished in the buff-colored clay. The similar dotted decoration on certain pots from Phylakopi may be cited as a Cycladic parallel (*Phylakopi*, Pl. XI, 6). The vessel may perhaps have been an infant's "feeding bottle."

No. 218, Fig. 88, No. 2. This, the smallest vase found at Zygouries, has a height of 0.02 m. and a diameter of 0.022 m. It resembles a short thimble with a rounded end. Carelessly made of pinkish buff clay, it has a rough surface decorated in the same style as the preceding example with five large irregular dots in lustrous red paint. One occupies the

¹ No. 113. Well refined pink clay; creamy slip.

² No. 8. Clay buff throughout; not meticulously refined; Ht. 0.074 m.; greatest diameter, 0.083 m.; length of spout, 0.035 m.

bottom, and the others are unevenly spaced around the side. I do not know what use could have been made of this diminutive vase except as a children's plaything, or possibly, as the shape suggests, a thimble.

No. 271, Fig. 88, No. 5.¹ Fragment of a small pyxis preserving more than half the rim, part of one side, and one lug; the base is lacking. Greatest diameter, 0.086 m. The body in its lower part seems to have been very squat, spreading out to a sharp angle; then it rises in a more rounded curve to a narrow mouth (diameter 0.035 m.) with an upright rim over which a lid no doubt fitted. At the angle were two long horizontal lugs set opposite each other, pierced vertically near each end. The vase is made of greenish buff clay, not well sifted; the biscuit is soft as a result of insufficient firing. The surface, to some extent prepared, but hardly slipped, is decorated with irregular lines fairly close together running from rim to base. There was probably a horizontal line following the angle of the body and possibly another around the edge of the rim. Short vertical dashes decorate the rim on the inside. The medium was originally a brownish black glaze which has crackled and almost totally vanished; a faint brownish trace alone remains to indicate where the lines ran.

No. 205, PLATE XII, No. 2. Height, 0.07 m.; diameter, 0.147 m. The most curious pot in the patterned style found at Zygouries is a squat askoid vessel with a basket handle, closed top, and a vertical spout. Spreading widely from a very narrow and deeply concave base to a sharp angle, the side curves back again to a sort of apex across which the handle is fairly symmetrically placed. The spout, which is missing and has been restored in plaster, was off to one side in the axis perpendicular to that of the handle. The vase is made of buff clay containing many foreign particles; it is baked fairly hard, and the surface is slipped and smooth. It bears a decoration in three kinds of technique, painted, incised, and punched, all on the upper curved zone. The painted decoration consists of broad careless lines dividing the zone into a series of narrow vertical panels of irregular width. The two on the side away from the spout are broader than the rest and have a line of dots running down through them from top to bottom. The other panels contain a single dot, or sometimes two, and have one or two at their tops between the ends of the dividing lines. The handle, finally, bears three rows of these painted dots. The incised decoration consists of four deeply cut lines or grooves along the top of the handle and four short transverse lines at its base. Below these latter is a large rounded impression. The angle between the upper and the lower zones is marked all the way around by very short, mostly vertical, incisions, close together, but not evenly spaced. Just above these incisions a row of small, deeply punched holes runs around the vase. The base of each handle is enclosed by a double row of the same kind, from which a connection extends on each side to a similar ring around the base of the spout. The two bases of the handle are likewise connected on the side away from the spout, and here in each of the two large panels, a line of these punched holes curves down to join the row encircling the vase above the angle. The holes and the incised lines are fairly deep, but no trace of white filling was found in them. The paint, which shows brush marks here and there, is reddish brown in color, much crackled, and has no lustre left. In the complexity of its decoration this pot is quite unique among Early Helladic productions; but in spite of the effort which seems to have been expended upon it, the effect achieved can hardly be said to

¹ No. 271. Greenish buff clay, containing many foreign particles.

be very successful. In shape the vessel might perhaps be regarded as a forerunner of the later stirrup vase.

D. UNPAINTED WARE

As at Korakou, there was at Zygouries a large amount of ware without paint, even without slip, carelessly made, but still too fine to be classed with coarse ware. In fabric

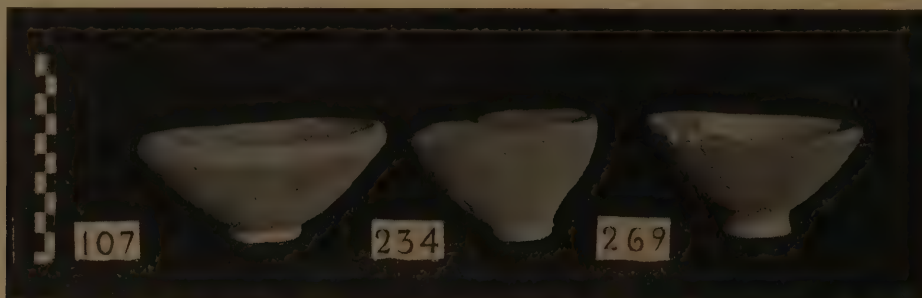


FIGURE 90. THREE SHALLOW BOWLS, EARLY HELLADIC UNPAINTED WARE, GROUP D



FIGURE 91. EARLY HELLADIC UNPAINTED WARE, SEAL IMPRESSION, AND IMPRESSED BASES

these vases are essentially the same as those of Group B in its latest phase (B I), except that they lack even the partial coat of glaze.

1. The most common shape is the shallow bowl, specimens of which are shown in Figure 90.¹ Some of them are fairly regularly shaped (No. 107) and have a well-smoothed surface; others are very irregular and sometimes badly misshapen as a result of sagging or warping before or during baking (No. 234). The base is often flat, often raised, and usually very crudely made, a clumsy ring of clay attached to the bottom of the vase. In a few instances (Fig. 91, Nos. 3, 4) the flat bases bear what looks like the impression of a

¹ No. 107. Ht. 0.057 m.; D. 0.133 m.; D. of base, 0.039 m. Grayish buff clay, not well sifted.

No. 234. Ht. 0.058 m.; D. 0.096 m.; D. of base, 0.03 m. Buff clay, rough, carelessly finished surface.

No. 269. Ht. 0.059 m.; D. 0.112 m.; D. of base, 0.036 m. Grayish buff clay, smoothly finished surface.

large coarse mat on which the vessels seem to have been worked — the impressions are too deep to have been caused merely by setting the vases down for drying. One fragment (Fig. 91, No. 2) has a clear impression of a leaf, exactly similar to that familiar on early pottery from the Cyclades ('Εφ. 'Αρχ., 1898, Pl. IX, No. 112; 1899, p. 85). Another fragment (Fig. 91, No. 1) is marked on its side near the base by the impression of a seal of circular form. The circular labyrinthine pattern of the seal is similar to that impressed on a fragment of terracotta from an Early Helladic deposit at Asine (*Bulletin de la Société Royale des Lettres de Lund*, 1923-1924, p. 165, Fig. 3) which, as Professor Persson points out, has Early Minoan affinities, and this small fragment therefore assumes importance in its bearing on the date of the settlement at Zygouries. The impression must have been made while the clay was soft before the vase was fired, but its meaning on the exterior of this shallow bowl is not so easy to explain. If it is a potter's mark it is a most unusual one, as no other similar example was found. Potter's marks were extremely rare at Zygouries, the total number found being hardly more than half a dozen, only two of which (Fig. 92) were completely preserved. One on the bottom of the base of a shallow bowl is a simple cross formed by two intersecting incised lines; a fragment in the glazed style bears a similar cross on its side just above the base.

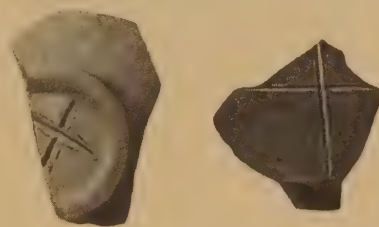


FIGURE 92. POTTER'S MARKS ON
EARLY HELLADIC WARE

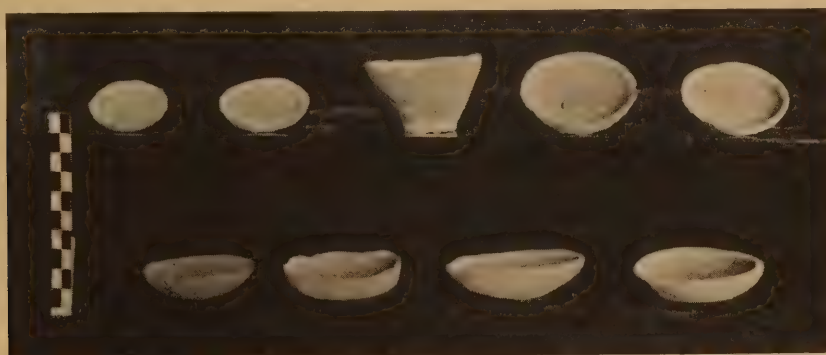


FIGURE 93. SMALL DISHES OR PATERAE, EARLY HELLADIC UNPAINTED WARE

2. A great many tiny dishes or paterae were found. They are usually rounded underneath and very shallow inside, and almost always crudely and irregularly made (Fig. 93). Each one has a small boss or "button" formed by an attached pellet of clay at the centre of the interior. These diminutive dishes, some of which measure less than 0.04 m. in diameter, appeared in quantities everywhere about the settlement, often in unbroken condition. What specific purpose they served is not clear to me.

3. A very closely related shape is a small ladle (Fig. 94),¹ the body of which is exactly like these paterae, save that it has no boss at its centre. From one side projects a fairly

¹ Dimensions of typical specimens: No. 212. D. of ladle, 0.071 m.; length of handle, 0.12 m. Buff clay, crudely finished. No. 242. D. of ladle, 0.047 m.; length of handle, 0.086 m. Grayish clay; carelessly shaped.

stout flat handle tapering somewhat toward its end, which is roughly folded back on itself. This latter is clearly a reminiscence of the carefully made ring in which the handles of the long dippers described above (p. 96 f.) terminate, and by which those utensils were evidently suspended. In the examples under consideration the fold at the end is not adapted for hanging and is probably no more than a meaningless survival. In most cases these ladles are extremely shallow and would serve acceptably as spoons; but a few have higher sides and a broader diameter, resembling modern ladles. More than a dozen specimens were found.

4. Another common shape, one example of which (No. 565, Fig. 95)¹ was found in Tomb VII and one (No. 303, Fig. 96)² in Tomb XX, is a low jar with flat bottom, broadly rounded body, and a rather narrow vertical neck (see also Nos. 111, 20, Fig. 97).³ Usually

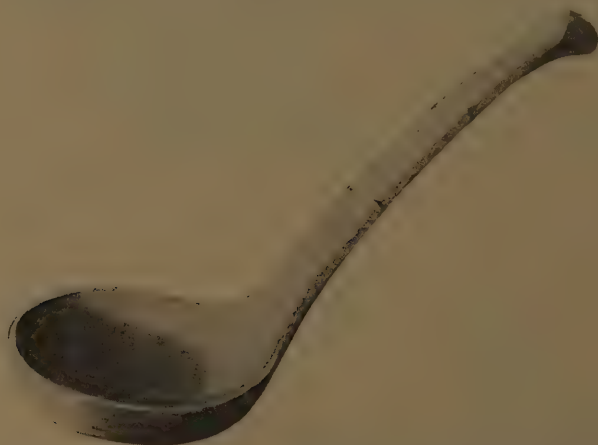


FIGURE 94. LADLE, EARLY HELIADIC UNPAINTED WARE, No. 211

it has two small, more or less flat, loop handles set vertically about half way down the body. On one very crude specimen (No. 273) heavy horizontal loop handles occur. These jars vary considerably in size, as may be seen from the illustrations. So far as could be observed the shape does not occur in the glazed technique.

5. A deep jar of related shape is illustrated in Figure 98 (No. 400).⁴ It is a well-made oval pot which has been put together from twenty-six fragments. It has a very small base formed by flattening the bottom; the centre is hollowed

out underneath and the vessel thus rests on a narrow ring. On each side, fairly high up on the body, is a broad flat loop handle of the usual vertical type, but here set horizontally. The neck splays outward in a bell-shaped form to a good rim. This jar, which is of much better fabric than the ordinary pots of this class, was found in the "*bothros* deposit" in the west scarp of the hill and, as its good lines and the form of the base indicate, is of relatively early date.

6. From the same deposit came a number of huge broad loop handles, examples of which appeared also in the deep pits south and west of the hill (Fig. 99). They seem to have belonged to enormous jugs or jars somewhat resembling the preceding in shape, but no whole pot could be reconstituted. The handles were apparently set vertically; some of them are more than 0.09 m. broad. A smaller specimen of the same general type (Fig. 100, No. 3) has two "rivet heads" on its upper surface. The fabric is in all cases good, though rough; the handles were made for service rather than for ornament.

¹ No. 565. Ht. 0.10 m.; D. 0.115 m.; D. of mouth, 0.07 m. Light buff clay containing many gritty particles.

² No. 303. Ht. 0.108 m.; D. 0.109 m.; D. of mouth, 0.08 m. to 0.085 m. Coarse buff clay; shape very crude and irregular.

³ No. 111. Ht. 0.104 m.; D. 0.119 m.; D. of mouth, 0.062 m. Coarse light buff clay.

No. 20. Ht. 0.154 m.; D. 0.169 m.; D. of mouth, 0.112 m. Grayish buff clay of coarse texture; well made and regular.

⁴ No. 400. Ht. 0.24 m.; D. 0.206 m.; D. of mouth, ca. 0.137 m. Grayish buff clay of varying shades, not well sifted. Well-made pot. The surface was originally smoothly polished.

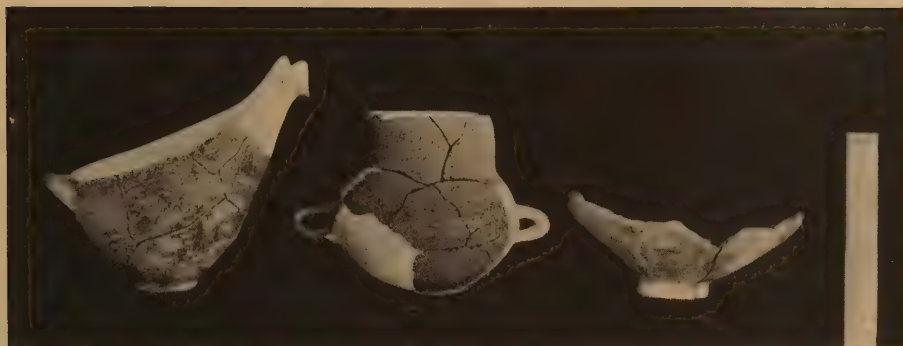


FIGURE 95. THREE EARLY HELLADIC POTS FROM TOMB VII,
Nos. 363, 565, 571

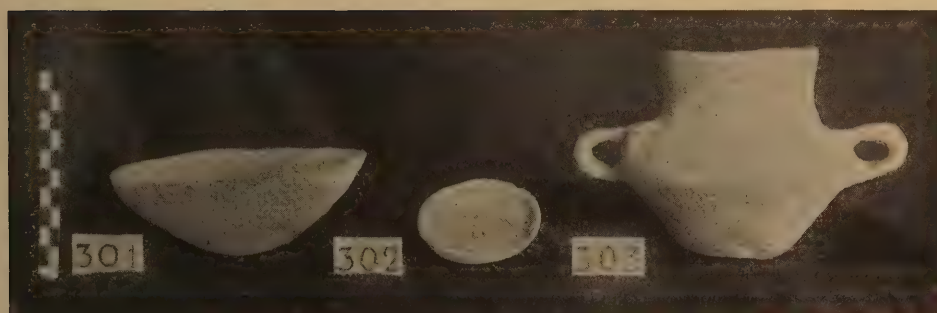


FIGURE 96. THREE EARLY HELLADIC POTS FROM TOMB XX

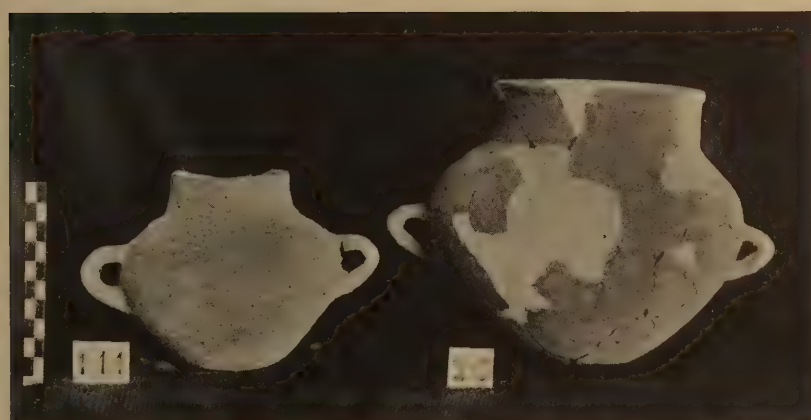


FIGURE 97. TWO JARS, EARLY HELLADIC UNPAINTED WARE

7. Finally there remains to be mentioned the deep basin shown in Figure 101 (No. 36),¹ restored from twenty-six fragments. It stands on a fairly small raised base, has sides rising in an almost straight line to a thickened rim, which has been somewhat flattened on top. There are no handles, but in their stead appear two long horizontal lugs each with a projection near its ends. They seem not especially useful for anything but ornamental purposes, and even as such their value is not great. The exterior of this basin presents a coarse porous texture; faint traces inside suggest that the interior was originally coated with a thin brownish wash of paint, and the pot should therefore perhaps be included in Group B I;



FIGURE 98. DEEP OVAL JAR, EARLY HELLADIC UNPAINTED WARE, No. 400

it has been described here, however, as offering a good connecting link between that group and Group D. The pot, found on the floor of the House of the Snailshells, belongs of course to the latest stage at Zygouries.

Other shapes of vases of this group were no doubt used in the settlement, but no further types are represented among the specimens we were able to put together. This plain ware as a whole, leaving out of consideration the early material of much better fabric from the deep deposits, is a poor class of pottery. From the conclusions which were reached (p. 100 f.) concerning the relative chronology of the different styles of glazed ware (Group B) and the evolution there represented, it seems probable that we have here the final step, coming next after the partially coated style, in the degeneration of that technique. Naturally the two styles found together on the floors of the same houses are here actually contemporary, but in this plain ware we have without doubt what would ultimately have become the predominant pottery if the development had been allowed to continue without interruption.

¹ No. 36. Ht. 0.174 m.; D. 0.305 m.; D. of base, 0.098 m. Coarse light buff clay, carelessly finished.



FIGURE 99. LARGE LOOP HANDLES, EARLY HELLADIC UNPAINTED WARE



FIGURE 100. EARLY HELLADIC HANDLES AND SPOUT SUGGESTING METAL PROTOTYPES

E. COARSE WARE, INCLUDING DOMESTIC POTS AND PITHOI

Coarse domestic ware was found in abundant quantities everywhere, both in the deep pits and in the trenches on the hill, representing the early and the intermediate stages, and of course especially in the deposits on the floors of the houses. No marked difference is recognizable among the pots from these three strata (except in the case of polished examples, only a few fragments of which came to light), which all present more or less the same appearance. It is usually a thick, heavy ware, made of coarse unpurified clay, generally not baked thoroughly hard. The color ranges from brick-red to a smoky black. Some of the pots seem blackened by the fire over which they were no doubt used for culinary pur-

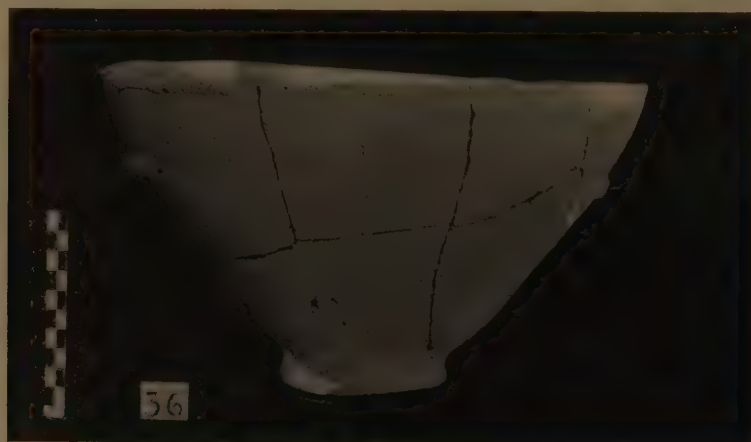


FIGURE 101. DEEP BASIN, EARLY HELLADIC UNPAINTED WARE

poses. Others were presumably storage jars and owe their blackness here and there to uneven firing. In most cases these vessels are roughly made, with no attempt at careful finish, being intended for hard use; but several examples standing on a good raised base exhibit better lines.

1. A shallow bowl with flat base (No. 53, Fig. 102),¹ similar in shape to the ordinary bowls of the glazed and the unpainted groups, was found on the floor of the House of the Pithoi. It is brick-red underneath, blackened by fire along the rim, and similarly discolored inside. The vessel, which has a diameter of 0.205 m., has no handles, but a widely spaced pair of conical projections on each side at the rim. It may have been employed as a sort of chafing dish, or perhaps rather, on the evidence of the discoloration, as a lid to cover a large cooking pot. The flat base was carelessly made, as a result of which the bowl is 0.051 m. high on one side and 0.065 m. on the other.

2. A type of small cup illustrated in Figure 102 (No. 213)² seems to have been fairly common. It is really almost an askos in shape, as may be seen from the forward position of the mouth. These cups sit on a flat base, and have a broad squat body which narrows

¹ No. 53. Coarse brick-red clay, smoked and blackened.

² No. 213. Ht. 0.079 m.; with handle, 0.103 m.; D. 0.099 m.; D. of mouth, 0.063 m. Coarse clay, gray at core, brick-red at surface.



FIGURE 102. SHALLOW BOWL AND CUP OF COARSE FABRIC, EARLY HELLADIC PERIOD

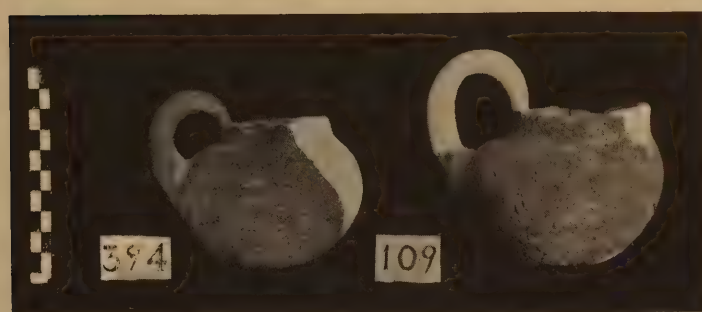


FIGURE 103. TWO ASKOID CUPS OF COARSE FABRIC, EARLY HELLADIC PERIOD

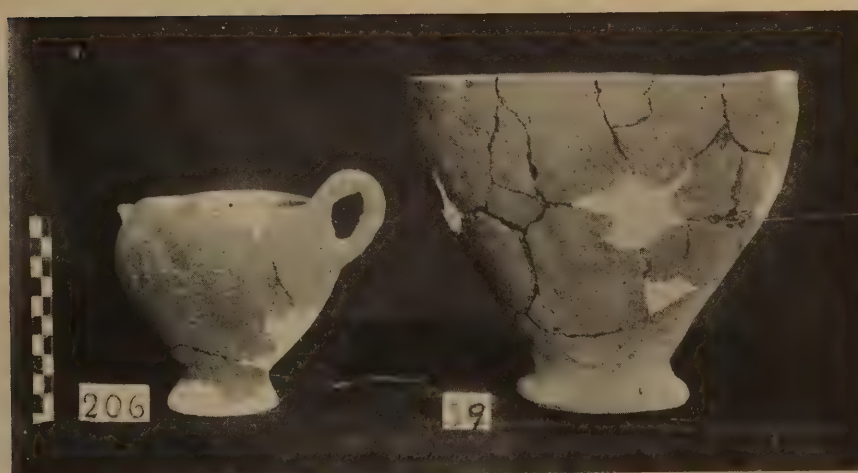


FIGURE 104. CUP AND JAR, COARSE WARE, EARLY HELLADIC PERIOD

to a mouth with an upright rim. The large round handle springs upward from the rim and then swings down until it reaches the body at approximately its widest point. Three cups of this kind were recovered almost complete (No. 213, Fig. 102; Nos. 109 and 394, Fig. 103).¹

3. Another kind of cup in a somewhat better style is shown in Figure 104 (No. 206, from House L).² Though coarse and heavy, it has a good shape, standing on a regularly formed

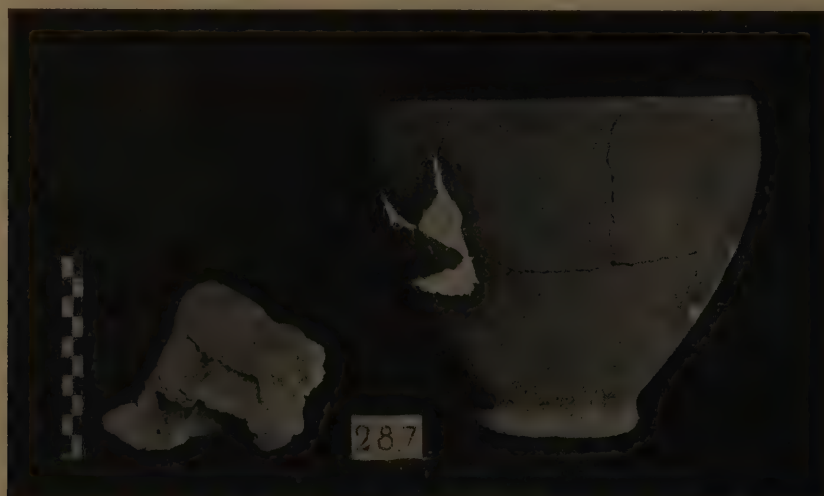


FIGURE 105. COOKING POT AND BEEF BONE, EARLY HELLADIC PERIOD



FIGURE 106. BROAD JAR, COARSE WARE, EARLY HELLADIC PERIOD

¹ No. 109. Ht. 0.071 m.; D. 0.10 m. Handle restored. D. of mouth, 0.069 m. Coarse gray clay, brick-red at surface. No. 394. Ht. 0.07 m.; D. 0.095 m.; D. of mouth, 0.054 m. Rather coarse clay, light brick-red in color.

² No. 206. Ht. ca. 0.106 m.; D. 0.115 m.; D. of mouth, 0.094 m. Very coarse brick-red clay.



FIGURE 107. HUGE JAR, COARSE WARE, EARLY
HELLADIC PERIOD

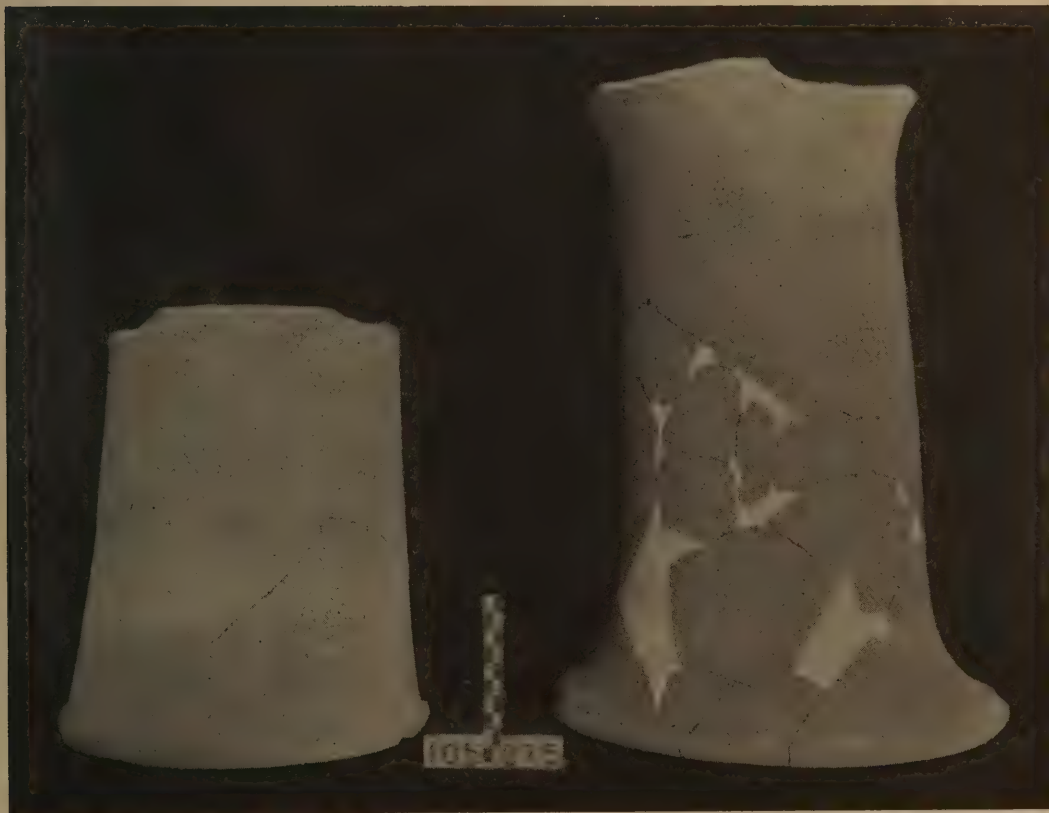


FIGURE 108. TWO CYLINDRICAL STANDS, COARSE WARE, EARLY HELLADIC PERIOD

raised base (which has been restored in plaster, but is correct), with a well-rounded body curving inward to the rim. There is a single round loop handle rising somewhat above the rim, and opposite it is a small horizontal lug. The vessel is brick-red in color, but on the side away from the handle has dark patches that seem to have been caused by fire.

4. The jar, an illustration of which appears in Figure 105 (No. 287),¹ was found in the House of the Pithoi on the floor behind the row of storage jars which stood against the rear wall of the chief room. It contained a very large bone, a beef joint, almost surely the remains of the last meal prepared in the house before its destruction. The vessel is a simple deep jar; it stands on a comparatively small raised base and has curving sides which rise to a broad mouth with rounded rim. Other similar jars are shown in Figure 104 (No. 39)² and Figure 106 (No. 572),³ both of which have a slightly flattened rim. The pot containing the bone is relatively small (height *ca.* 0.175 m.); a huge example of the same general type, which seems to have been exceedingly common, is offered in Figure 107 (No. 573).⁴ It is 0.43 m. high, and its mouth is elliptical rather than circular, with a long diameter of 0.50 m. and a short diameter of *ca.* 0.44 m. This shape may have been accidental rather than intentional, due perhaps to sagging while the vessel was drying before firing. The pot, which came from the House of the Snailshells, seems altogether too large to be used for cooking and was probably a storage vessel.

5. Figure 108 presents two large examples of a curious shape (Nos. 105 and 275).⁵ They seem to be substantial cylindrical bases or stands which supported some kind of broad shallow basin made in one piece with them. This basin itself is in both cases unfortunately almost entirely missing, and its size and shape are consequently matters of conjecture. The stands, which are of course hollow, are well-made supports. The smaller one widens toward the bottom and has a raised and impressed band running around it just above the foot. Height *ca.* 0.26 m. The larger, 0.40 m. high, swells out below to a bell-shaped foot which is likewise decorated with a raised and impressed band. The foot has a diameter of 0.298 m., from which it is legitimate to conclude that the basin it supported was a very large and ponderous one. The cylinder decreases slightly in diameter as it rises, measuring *ca.* 0.16 m. across at the top. No good analogy to this shape in the field of Early Helladic pottery seems to have been previously published.

6. In the deep pits, which have been so often mentioned, and rarely on the hill itself, were found not a few bases or fragments of bases of coarse pots bearing on their under side the clear imprint of a mat. As appears in the illustration (Fig. 109) these mats must have been of many different kinds and weaves: some were apparently circular, plaited in spirals; others follow a rectangular system. The most curious is a small fragment (Fig. 109, No. 7) of coarse pinkish gray clay, coated with black glaze above and below. On one side it bears an impressed pattern formed of odd fan-shaped figures arranged in concentric rows around an incised central circle. Whether this was the interior or the exterior surface of the vessel

¹ No. 287. Ht. 0.175 m.; D. 0.202 m.; D. of base, 0.087 m. Coarse brick-red clay, but well shaped.

² No. 39. Ht. 0.172 m.; D. 0.208 m.; D. of base, 0.09 m. Coarse brick-red clay, outside smoked.

³ No. 572. Ht. 0.236 m.; D. 0.275 m.; D. of base, 0.117 m. Coarse brick-red clay.

⁴ No. 573. Coarse brick-red clay.

⁵ No. 105. Coarse buff clay, no slip.

No. 275. Coarse clay, gray at core, pink at surface; no slip.

does not appear. No parallel to this piece is known to me. These impressions provide here at Zygouries still another link with the Cyclades, but yield nothing to add to the discussion of their meaning by Edgar (*Phylakopi*, pp. 94 ff.).

7. There remain to be mentioned certain large coarse baking pans similar to those found at many other Early Helladic sites (Cf. the "rugose ware" at Tsani, *Prehistoric Thessaly*,

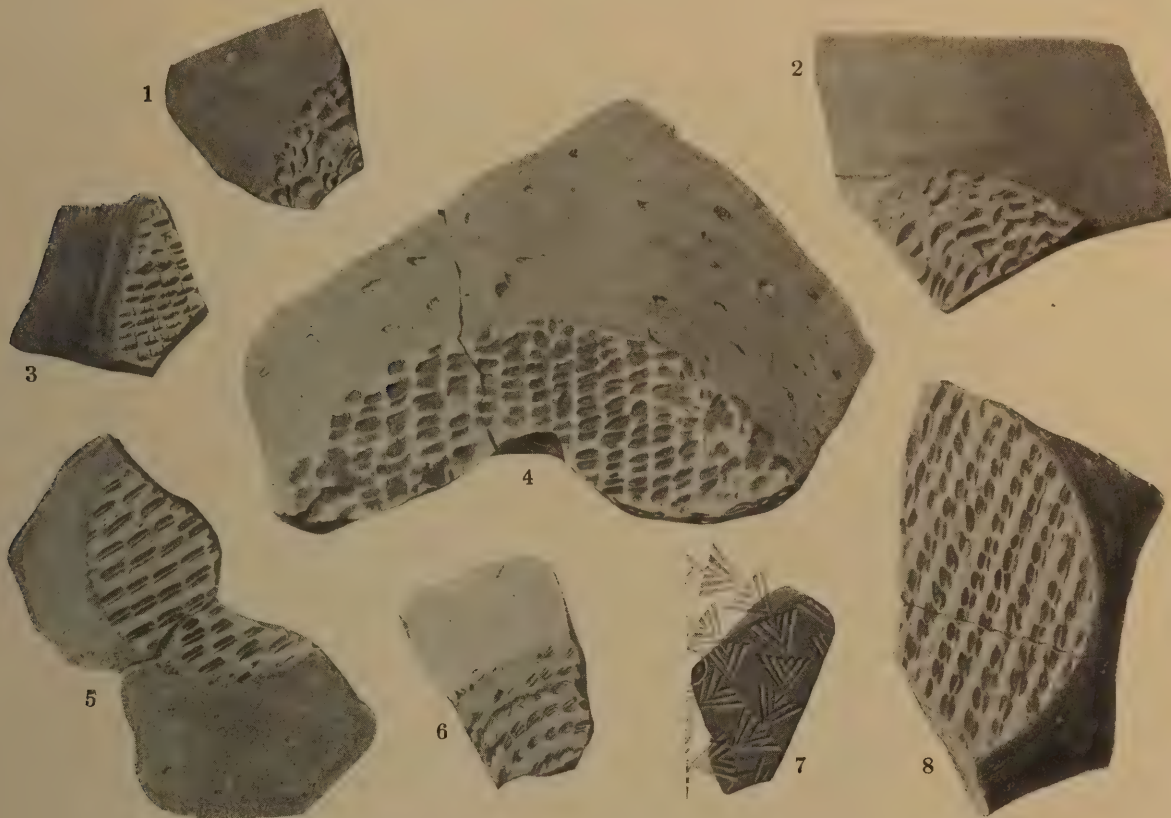


FIGURE 109. MAT IMPRESSIONS, COARSE WARE, EARLY HELLADIC PERIOD

p. 144; *Korakou*, p. 13), a good many fragments of which were found all about the settlement. Each house seemed to have at least one such utensil, and not a few sherds also came from beneath the floors. Unfortunately not a single example was sufficiently preserved to be worth restoring, and nothing further can be said regarding the shape than has already been published (*Korakou*, p. 13, Fig. 15), except that it seems doubtful if these pans had a handle. The place at which the rim, decreasing in height, almost vanishes in the bottom of the pan may have been merely a broad channel or spout to facilitate pouring. Curiously all specimens found are broken at this point and the vital piece necessary to settle the question is always missing. No handle at all appropriate for these large pans came to light at Zygouries. Some of these vessels are of impressive size; one example, nearly half the side of which is preserved, has a diameter exceeding 0.55 m.

8. The ordinary storage vessels of great capacity throughout the settlement are pithoi of various shapes and sizes. Remains of these were brought to light in every house: at least

four originally stood in a row against the rear wall of the great hall in the House of the Pithoi; one occupied a similar position in House D; and six of somewhat smaller size stood propped up with stones in the southwest chamber of House L. In the other houses they had all been completely reduced to fragments, and their original position was no longer indicated. In the region just west of the House of the Pithoi a number of hollows in native rock (or sometimes apparently in the pavement) appeared, a few still containing bottoms of pithoi which had once been set up there.

The largest of all the specimens were found *ca.* 100 m. south of the hill, where they had been revealed in the steep side of the deeply cut bed of a small stream. Here stood four or

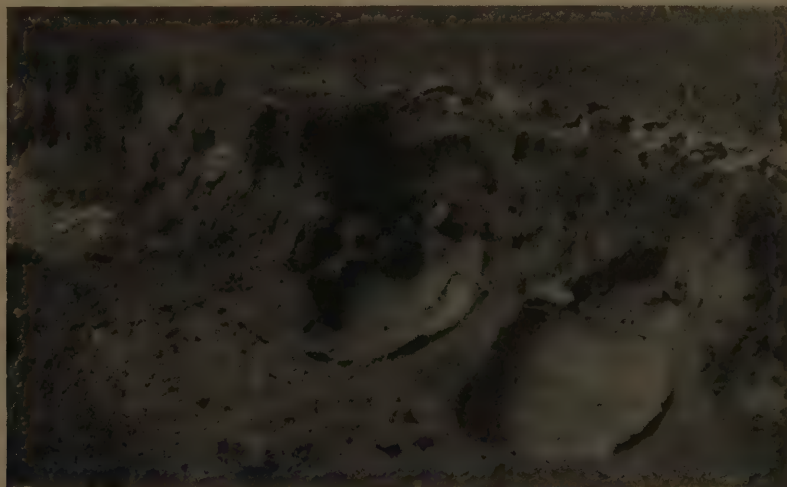


FIGURE 110. LOWER PART OF TWO PITHOI IN SIDE OF STREAM-BED

five huge vessels within a comparatively small area; fragmentary remains of badly damaged walls here and there led to the conclusion that these jars had once stood in rooms of houses built in this quarter. No pottery of any consequence was found about them, and there was little evidence to date them certainly; but one contained a narrow whetstone and two small stone spools or pestles of a characteristic Early Helladic type, and there is consequently no reason to doubt their Early Helladic date. Three of the five were preserved only in their lower part (Fig. 110), but two were so nearly complete that their dimensions could be measured fairly accurately. They were made of coarse brick-red clay, had a small flat base, broad egg-shaped body, narrow neck, and a thick wide rim. No. 1 had a height of *ca.* 1.75 m. and its greatest diameter was 1.15 m. No. 2 was more globular in shape with a diameter of 1.30 m. and a height of more than 1.50 m. No. 4, which contained the stone objects mentioned above and was probably originally as large as Nos. 1 and 2, had a hole in the centre of its small flat bottom. The aperture was closed with a lead stopper — evidently a device for draining the jar without tipping it over. The neck was very narrow, with an inside diameter of 0.334 m.

The pithoi found in the houses on the hill were all smaller than those in the stream bed, but some of these also were very large vessels. In all cases, where evidence was preserved, the base was extremely small, though it did not actually terminate in a point. These pithoi

were fitted into hollows dug into the floor to receive them, and sometimes packed with stones, so that they stood firmly and securely and did not depend on the narrow base alone for support.

One jar from the House of the Pithoi, though utterly shattered, was practically complete and has been reconstructed as shown in Figure 111 (No. 575, the second in the row, counting from the right, in Figure 10).¹ It is 0.91 m. high and has as its greatest diameter 0.66 m. Its small, well-shaped, raised base has a diameter of only 0.155 m. The rim is flat, 0.04 m.

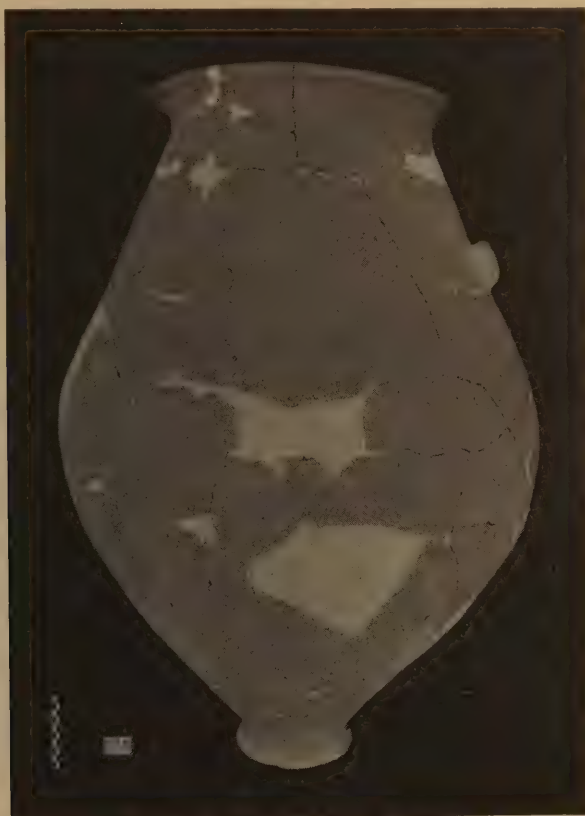


FIGURE 111. EARLY HELLADIC PITHOS

wide, and the outside diameter of the mouth is 0.41 m. There are no handles, but rather more than two thirds of the way up from the bottom are four large bosses, not very symmetrically spaced around the pithos. These bosses are roughly made, with a projection of 0.025 m. to 0.03 m. and a diameter of 0.05 m. to 0.06 m. Their purpose was no doubt to facilitate the lifting of the pithos by preventing a rope from slipping when tied around the body. The pithos is light buff in color with patches of pink here and there; it has no paint and no other decoration.

Another example (No. 576, Fig. 112: No. 4 in the row in the House of the Pithoi)² is unfortunately not completely preserved, lacking its upper part and rim. As the vessel

¹ No. 575. Coarse pink clay, lightening to buff at surface.

² No. 576. Coarse clay, gray at core, brick-red at surface; coated with thin black glaze, with reddish mottling here and there.

stood in the house, the rim must have reached almost the modern surface of the ground and had been broken and carried away by the plough. This pithos, which was much larger than the preceding, has an extreme width of 0.81 m. and must have been more than 1.20 m. high. The base again is very small, having a diameter of only 0.15 m. The jar is finished in the glazed style, being completely coated with reddish brown paint, deepening here and there to brownish black; the paint is badly crackled and much has worn away. The upper part of the vessel is decorated with two plastic horizontal bands which bear slanting impressions of a thumb or of a blunt instrument made in such a way as to give the effect of the

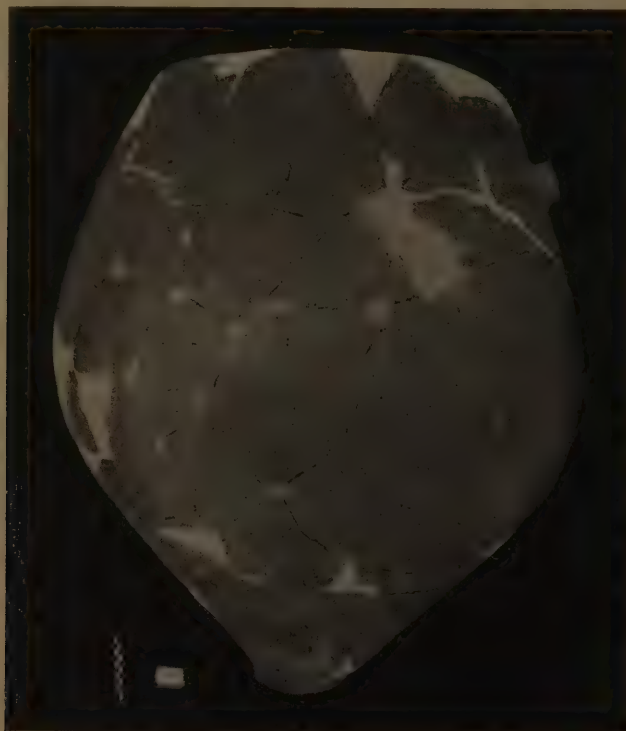


FIGURE 112. EARLY HELLADIC PITHOS

twisted strands of a rope. Four large bosses, approximately evenly spaced, interrupt the lower rope band and the appearance of this arrangement supports the explanation suggested above of the purpose of the bosses. The walls of the pithos are not absolutely uniform in thickness, varying from *ca.* 0.01 m. to nearly 0.02 m.; but it is altogether a very well-made pot.

That pithoi of other shapes occurred is shown by the fragment illustrated in Figure 113 (No. 122).¹ Here we have only a small piece of a huge flat rim (averaging 0.075 m. wide), indicating a mouth with an outside diameter of *ca.* 0.63 m. The body of the vessel seems to have swelled out broadly, and it was evidently a container of great capacity. Near the rim is preserved a small horizontal loop handle, not strong enough to have been of material help in lifting the pithos. From it two raised rope bands run off in either direction, slanting slightly upward toward the rim. There must have been other handles lower down on the

¹ No. 122. Coarse clay, which throughout has the color of burnt brick.

body — perhaps this is an early example of the type common in later periods in which several tiers of small handles are arranged in vertical rows. The pithos was originally coated with good black glaze which has been rubbed off for the most part.

In Figure 114 are illustrated several fragments of rims of various large vessels to show some of the typical stamped and incised patterns which frequently occur as decoration. As may be seen they are of many different types and styles and include some of rather elaborate design. No. 1 is a fragment from the side of a flat pan. Height 0.04 m. It is made of coarse clay, gray at the core, pink

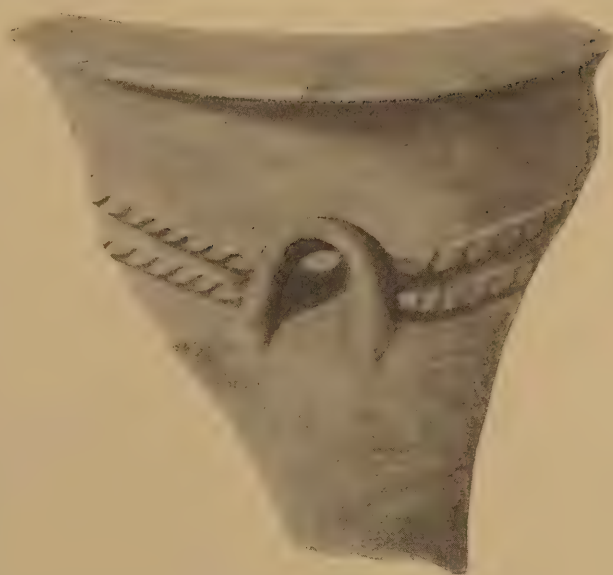


FIGURE 113. FRAGMENT OF RIM OF PITHOS, EARLY HELLADIC PERIOD, NO. 122



FIGURE 114. FRAGMENTS OF RIMS OF LARGE VESSELS, EARLY HELLADIC PERIOD

toward the surface. The floor of the vessel is 0.02 m. thick, and the bottom is very rough as in the baking pans mentioned above (p. 117). The rim is broad and thick (0.038 m. wide); its flat top bears two rows of deep wedge-shaped impressions, one along each side, stamped so as to leave a raised zigzag ridge or band between them.

No. 2 is a very curious piece, apparently from the rim of a very large vessel, which had a plump body narrowing to a relatively small mouth. The exact shape is uncertain, but it was of extremely heavy thick fabric. The clay is coarse, brick-red in color. The rim is flat on top; along its outer edge it is decorated with a band of concentric half circles, which seem to have been incised, not stamped. The number of these half circles in each group varies from a minimum of three to a maximum of six. The incision is not very deep, and there is no evidence to show whether or not it was ever filled with white pigment.

No. 3, of coarse buff clay, gray at the core, is a fragment from a circular pan similar to the original of No. 1, but smaller. Height of pan, 0.047 m.; thickness of floor, 0.016 m.; of side wall, 0.02 m. The bottom is rough, as in the case of the rugose pans. The top of the rim is flattened; its decoration is similar to that of No. 1, consisting of two rows of triangular impressions so arranged as to leave a narrow zigzag line in relief between them.

No. 4, a piece of a large, heavy, circular pan, is made of coarse clay, which varies from brick-red to gray in color. The floor is 0.035 m. thick, and the bottom is rough as in the foregoing examples. The height of the pan was 0.06 m., and the rim, which is rounded on top, is 0.043 m. wide. Its whole upper surface is covered by a belt of twelve or more rather fine parallel zigzag lines in relief, which almost give the effect of a herring-bone pattern. The relief is low and was obtained apparently by incising away the background; though the execution is careless, the effect is not displeasing. The lines in relief are lightly polished.

No. 5 is a broad lug or solid handle from a vessel of some size; it is made of coarse, porous, brick-red clay. The chief interest of the piece is in the treatment of the edge of the lug, which bears a series of crude irregular impressions, giving a scalloped effect.

No. 6 seems to be a fragment from the side of a large pithos, with walls 0.01 m. to 0.015 m. thick. It is made of coarse gray clay, pink toward the surface, which contains a few particles of yellow mica. Around the body of the pithos ran a raised horizontal band, *ca.* 0.065 m. wide and 2 mm. to 3 mm. high, decorated with a double row of connected spirals. The technique is similar to that of No. 4: the spirals are formed by fairly broad lines in relief, the background between them having been somewhat crudely incised or cut away. In spite of its rather crude execution, this piece is noteworthy, since the spiral is, to say the least, exceedingly rare among the decorative motives of the Early Helladic Period. Above and below the raised decorated band the surface of the pithos was coated with a thin wash of brownish black glaze, which shows only the slightest traces of lustre. It seems to have been applied with a brush *ca.* 0.025 m. wide.

No. 7, of coarse gray clay, fired to pink at the surface, is a fragment of a large vessel, probably a pithos, decorated in a manner similar to that of the preceding and No. 4. The vessel bore a raised horizontal band (height 2 mm.) on which, between broad borders, runs a pattern of parallel zigzag lines in relief. The lines are fairly fine, but rather widely spaced; in this case the background seems not to have been cut away, but to have been stamped or impressed by a blunt implement.

F. MISCELLANEOUS OTHER WARES

Several vases were found in the course of the excavations which do not fit especially well into any of the above groups, nor indeed do they agree with one another. They have accordingly been left for consideration in the present section as miscellanea.

No. 277, Fig. 115.¹ A jug with flat base, upright oval body, high splaying neck, wide mouth, basket handle, and a tubular spout from the side, following the axis of the handle. The neck and the handle are almost completely preserved, as is also the base; a large part

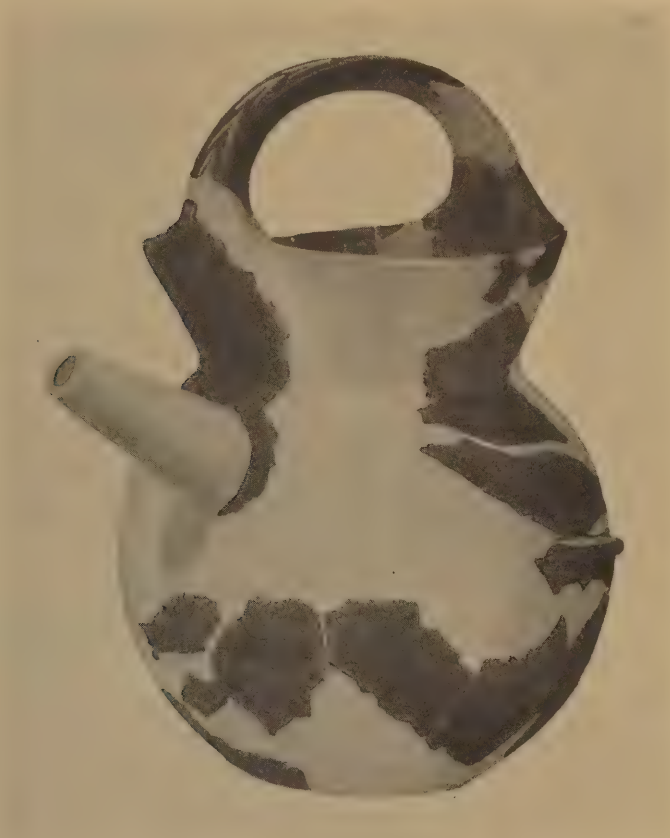


FIGURE 115. JUG WITH SPOUT AND BASKET HANDLE, EARLY
HELLADIC PERIOD, No. 277

of the side is missing, and only the attachment of the spout remains; the missing parts have been restored in plaster. The pot was found on the floor of the House of the Pithoi and cannot, therefore, be considered earlier than the third phase of the Early Helladic Period. It is of coarse, thick manufacture, but the surface is covered with a heavy red slip which is brilliantly burnished, though not in exactly the same style we have seen in the polished wares of Group A. This pot seems much cruder and inferior in technique. The handle is decorated with a row of incised chevrons done in broad shallow lines. Height 0.16 m.; to

¹ No. 277. Coarse red clay, slightly gray at the core.

top of handle, 0.20 m.; greatest diameter 0.128 m.; diameter of mouth along handle, 0.098 m.; transversely, 0.119 m.

No. 245. Fragment of a shallow dish or plate with a large flat base, and short sides spreading widely. It is made of coarse brick-red clay, containing many particles of stone. The surface is coated with a thick reddish brown-black slip, brightly polished, much as in the case of the preceding example. The base seems to have had a diameter of *ca.* 0.16 m. The sides are from 0.04 m. to 0.05 m. wide (from the base) and end in a plain rounded rim. The plate was only *ca.* 0.027 m. high.



FIGURE 116. CUP ON STEM, WITH INCISED DECORATION, EARLY HELLADIC PERIOD, No. 250

No. 250, Fig. 116.¹ A small well-made cup on a low stem with fairly broad foot. The foot is hollowed out below and is pierced by three regularly spaced round holes, giving an open-work effect. The cup itself has a rounded body with a splaying rim which makes the mouth relatively large (diameter, *ca.* 0.085 m.). There is one sturdy, broad, flat, loop handle, which rises well above the rim. The cup, though not of fine fabric, has been finished with care. Its surface is slipped, brownish in color on one side, burnt to a black on the other, and everywhere well polished. A good many particles of mica appear in the clay.

The chief interest of this cup lies in its decoration, which consists of a broad zone about the middle of the body, marked off by three, far from parallel, incised lines above and a single line below.

The zone is filled with cross-hatching produced by irregular oblique incised lines, and the ground of the uneven diamonds and half diamonds thus formed is punctuated by small dots impressed with a sharp-pointed instrument.

A zone of similar decoration runs around the foot, divided roughly into three panels by the holes mentioned above. Here the pattern is not cross-hatching, but merely a series of unequal upright strips, separated by incised lines and filled with punched dots. No trace remains to show whether or not the incisions were once filled with white. The cup is attractive in shape and effect, in spite of the careless hand evident in the execution of the pattern.

No. 112, Fig. 117.² Lower part of a goblet or a chalice standing on a high stem with broad, bell-shaped foot. It is a product of coarse clay, practically unscreened; but the surface, though it has no marked polish, is smooth and probably lightly slipped. The stem shows traces of the paring by which it was whittled down to its final form. The color is a dirty reddish brown, blackened here and there as if by fire. The most remarkable peculiarity of the vessel is that the bowl (the upper part of which is unfortunately missing) bears at least two horizontal rows of small crosses which are slit quite through the walls. In the lower belt

¹ No. 250. Ht. 0.093 m.; greatest diameter, 0.089 m.; D. of base, 0.051 m.; D. of mouth, 0.085 m. Clean buff clay, but carbonized here and there to gray or even black. Contains some fine particles of mica.

² No. 112. Ht. as preserved, 0.115 m.; greatest diameter, 0.13 m.; D. of base, 0.092 m. Clay coarse, gray at core, changing here and there toward the surface to pink, but much blackened by carbonization.

were ten such crosses fairly evenly spaced; in the next the number was increased to eleven or twelve. The crosses measure on the average 0.02 m. by 0.02 m., having their arms approximately equal. Since they penetrate through to the interior, the chalice could certainly not have been intended to hold liquids; perhaps it was some kind of a brazier or incense burner.

It is not especially like any other fabric of the period from Zygouries; but since it was found beneath one of the large pithoi which, as mentioned above, were excavated in the side of the small gully formed by the stream that flows past the site, and seemed undoubtedly to be of Early Helladic date, its attribution to the same period is almost surely correct.

MIDDLE HELLADIC PERIOD

As was the case with the architectural remains, pottery of the Middle Helladic Period also proved very scanty at Zygouries. It occurred chiefly in the west central part of the hill, where the three graves described above (p. 39 f.) were likewise discovered, at the south end of the settlement close to the surface of the ground, and in the deeper strata below the potter's shop in the eastern scarp of the mound. In the latter place was also uncovered the wall of a building dating from Middle Helladic times. A few scattered sherds appeared elsewhere on or just beneath the surface of the soil at various points in the settlement. The finds of pottery are thus, though meagre, nevertheless sufficient to make it certain that the site was occupied in the Middle Helladic Period; but the occupation must have been on a small scale — hardly more than a hamlet succeeding the prosperous Early Helladic village.

The pottery fits into the classification adopted in the report of the excavations at Korakou (*B.S.A.*, XXII, pp. 180 ff.; *Korakou*, pp. 15 ff.) and will be described in the same order. Some of this ware seems still to have been shaped by hand, but the great majority of the pots were clearly thrown on the potter's wheel, as appears from the regular marks of rotation often visible on the interior surface.

A. MINYAN WARE

I. *Gray Minyan*.

This variety occurred in all the areas named above, though in extremely scanty quantity. The material consists only of shattered and scattered fragments, very few of which seem to belong to the same vase; and it accordingly proved impossible to put together a



FIGURE 117. FRAGMENTARY GOBLET OR CHALICE, EARLY HELLADIC PERIOD, No. 112

single pot. Some of the sherds, very thick and crude and with rough irregular surface inside, appear to be from pots made by hand. But the best have the regular shape and fine thin walls of standard Minyan ware and were certainly formed on the wheel. The color is curiously light for gray Minyan ware and some of these pieces seem almost to form an intermediate step between Gray and Yellow Minyan. So far as could be observed, none of these vases at Zygouries were made in moulds, which Professor Persson, from the evidence brought to light at Asine, has concluded was the usual process of manufacture of Minyan Ware (*Bulletin de la Société Royale des Lettres de Lund*, 1924-1925, pp. 67 f.).

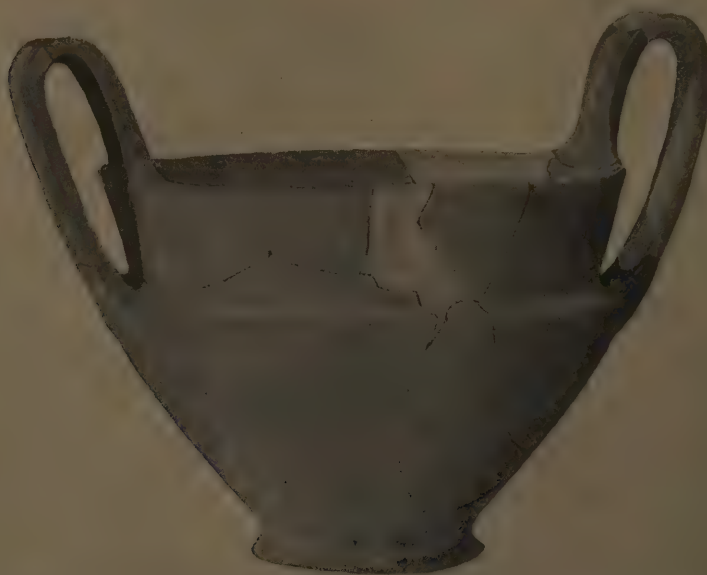


FIGURE 118. YELLOW MINYAN GOBLET, No. 106

The shapes chiefly represented among our fragments are large, deep cups or bowls with well-rounded body, splaying, flat rim and two strap handles forming a small loop (*Korakou*, Fig. 22, p. 16); or similar cups with sharply angular profile of side. Flat bases seem to be universal, and this ware in general looks as if it might be of a fairly early type, closely resembling that from Gonia.¹ Goblets on a ringed stem must have been extremely rare as only one such stem was found.

The total number of fragments reached only a few hundred.

II. *Argive Minyan.*

Hardly more than a dozen sherds came to light, one of which, from Tomb IV, has already been mentioned (p. 41).

¹ Unpublished. Only a preliminary account of the excavations at Gonia has appeared (*A. J. A.*, 1925, p. 7), but the detailed report is awaiting publication.

III. *Yellow Minyan*.

Although considerably more common than Gray Minyan, this fabric too was comparatively scanty at Zygouries. It had the same general distribution, but most of it came from the deep pits in the eastern edge of the hill. The shapes represented are those familiar from other contemporary sites, chiefly cups or bowls with flat splaying rim, and goblets on a stem.

No. 106, Fig. 118. Height, 0.111 m.; diameter, 0.152 m. Goblet, practically complete, from the pit north of the Potter's Shop. The shape is similar to that of a cup found by Schliemann in the Sixth Shaft Grave at Mycenae (Furtwängler and Löschcke, *Mykenische Thongefässe*, Pl. X, No. 48 = *J.H.S.*, 34, 1914, p. 136, Fig. 10), though it has merely a broad raised base instead of a stem. There is the usual angle at the shoulder and the high flattened rim with fairly



FIGURE 119. STEM OF YELLOW MINYAN
GOBLET, No. 307, FROM TOMB XXII



FIGURE 120. COARSE YELLOW MINYAN WARE, STEMS OF GOBLETs

sharp edge. On each side is a high handle, flat for most of its length, but slightly concave at its highest point.

The vase is made (on the wheel) of coarse yellowish buff clay; its surface is slipped, but not very smoothly polished.

No. 307, Fig. 119.¹ Stem of a goblet. It has a rather broad foot with the edge turned slightly up, and the centre of the bottom hollowed out. The fabric is not especially good and the fragment is mentioned here only because it had been used in its present condition as a lid and was found actually in place covering jug No. 304 (PLATE XIV, No. 3) in Tomb XXII.

Though stemmed goblets in Gray Minyan ware were exceedingly rare, as remarked above, a good many stems of such vessels in the Yellow Minyan technique came to light. Some of these, specimens of which are shown in Figure 120, are of particularly coarse crude fabric and must have supported goblets of awkward size and weight. These stems are usually ringed, sometimes with narrow grooves almost like incisions, sometimes with broad channels; in the number of rings there is also variety, some specimens having only one, others having eight or more. The surface is often rough and irregular, and never very highly polished. Archaic-looking stems of this kind have been found at many Middle Helladic sites, including Mycenae, but no complete goblet has yet been recovered in this coarse heavy fabric.

No. 119. Small cup, well made and properly fired, of clean light buff clay. The regularity of the shape and the even thickness of the thin walls are due to the wheel. The vessel is really a sort of bowl with rounded bottom, the curve of which continues upward to the sharply edged straight rim without angles. There were originally two "high-swung" handles, similar to the single one on certain cups from Korakou (*Korakou*, p. 19, Fig. 26); both are missing.

B. MATTPAINTED WARE

Mattpainted ware, which had the same distribution as that of the preceding group, was considerably more common than Minyan ware, though by no means abundant. The three classes of this group, all of which are characterized by their decoration with patterns in dull lustreless paint, are represented chiefly by fragments; but six complete pots were found in the Middle Helladic tombs and merit illustration here.

I. *Coarse Style.*

A few typical sherds are shown in Figure 121. The decoration usually takes the form of simple linear patterns in broad careless lines, a few bands around the body, the base of the neck, and just below the rim, the upper part of the body often being marked off as a zone in this way. Occasionally these bands are elaborated by a line of attached festoons (Fig. 121, Nos. 1, 2, and 7), and sometimes geometrical figures such as diamonds or spirals appear (Fig. 121, Nos. 4 and 7). The zone is frequently divided by vertical lines into a series of panels or metopes (Fig. 121, No. 1). There are also a few scanty remnants of a freer style of decoration in which grotesque animals or birds with enormous claws are represented (Fig. 121, No. 3).

¹ No. 307. Pink clay, pretty well refined; whitish slip.

No. 580, Fig. 122. Height 0.19 m.; greatest diameter, 0.163 m. Large coarse jug, about one half of which is preserved. The vessel is crudely made, apparently not on the wheel, with thick heavy walls, showing in the fractures a coarse pinkish gray biscuit containing many small stones. The surface is slipped and fairly smooth, though irregular. The pot

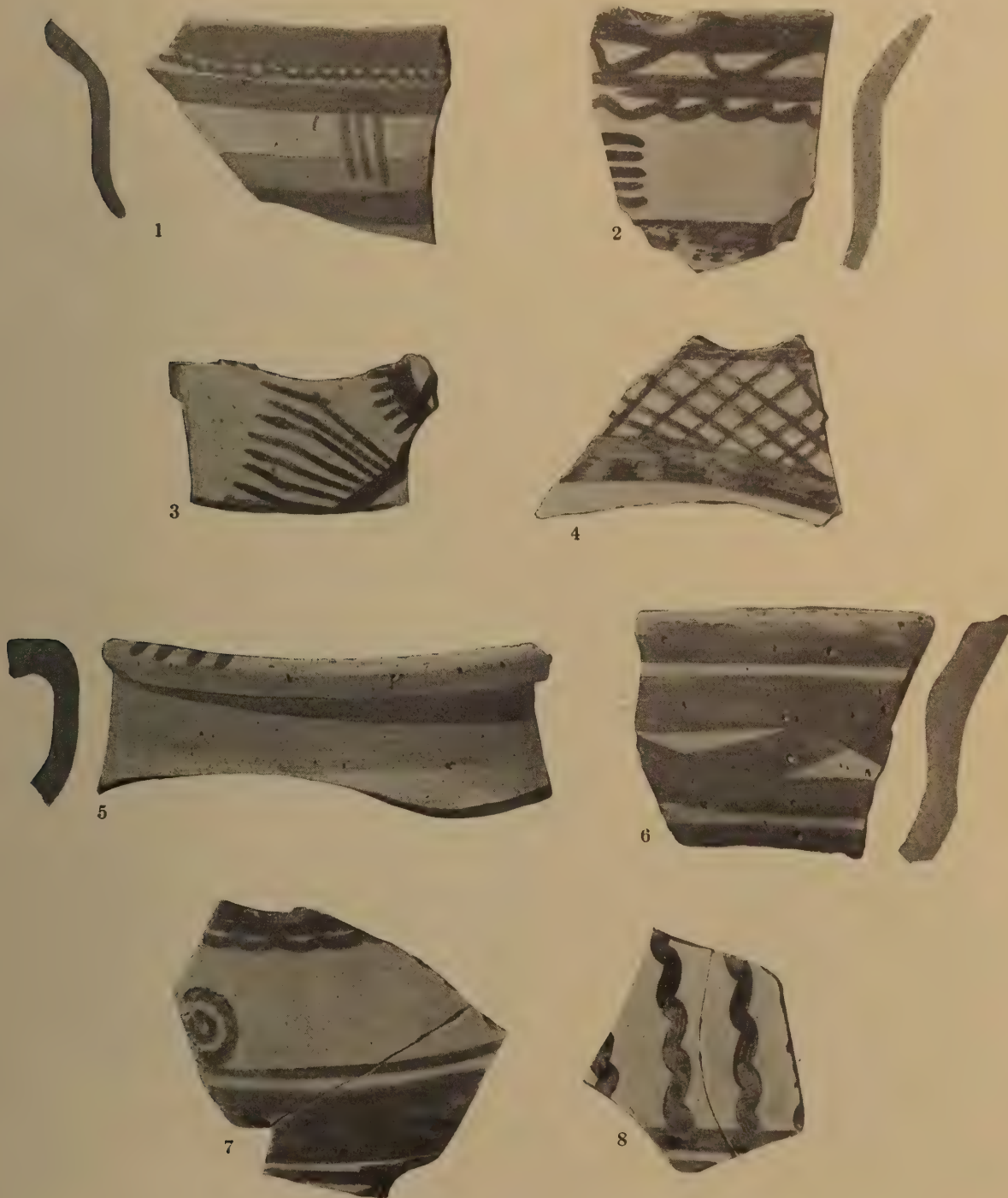


FIGURE 121. SHERDS OF MATTPAINTED WARE, CLASS I

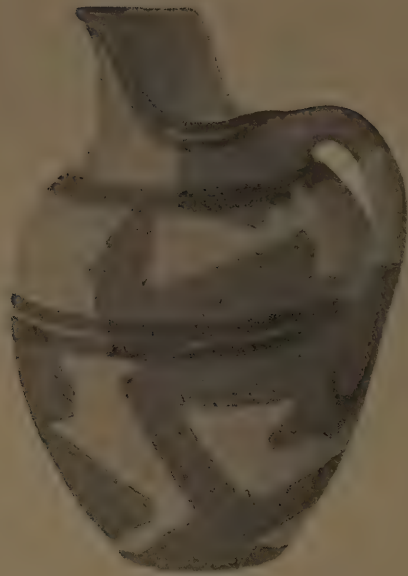


FIGURE 122. JUG, MATTPAINTED WARE,
CLASS I, No. 580

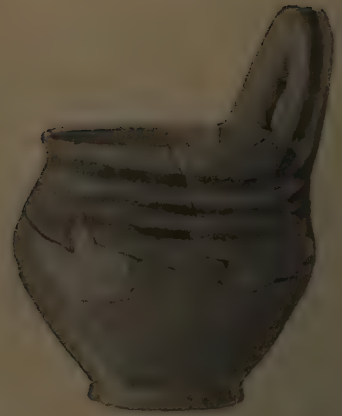


FIGURE 123. CUP WITH SIDE HANDLE
MATTPAINTED WARE, CLASS I, No.
94, FROM TOMB I



FIGURE 124. SMALL JUG, MATTPAINTED
WARE, CLASS I, No 95, FROM TOMB I

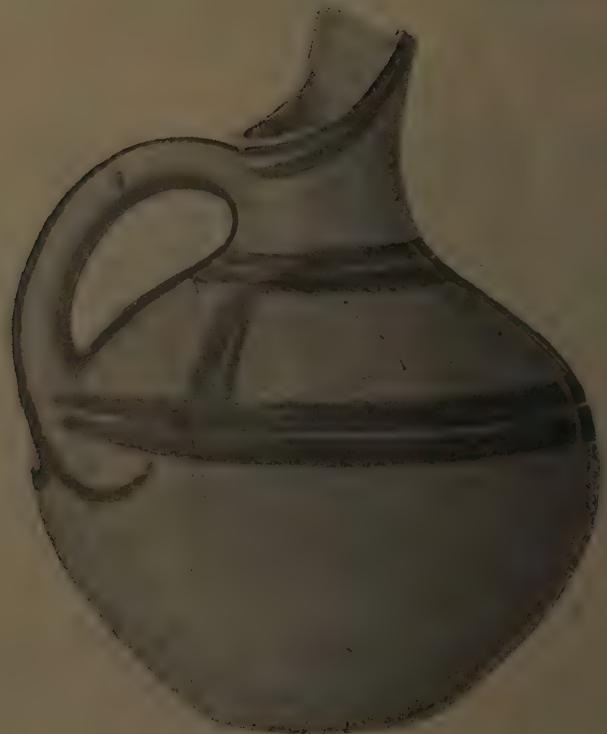


FIGURE 125. JUG WITH CUTAWAY NECK, MATTPAINTED WARE,
CLASS I, No. 96

has a flat base, an oval body, and a low neck which may have ended in a projecting spout. A round handle runs from the widest part of the body to the neck.

The decoration is the typical one described above. There is also a line of paint running down the handle and dividing into two below it, each end curving off to the side.

Tomb I produced the two following small vases in this style:

No. 94, Fig. 123.¹ Small cup of very coarse careless make. It has a high thick loop handle, both ends of which spring from the rim on one side. This type of cup with a side handle is especially characteristic of the Middle Helladic Period, occurring in Minyan ware as well as in the present group. The slightly raised base is badly made, and the cup leans to one side. The decoration consists of three irregular bands of black paint around the upper part of the body, and a similar broad line along the top of the handle.

No. 95, Fig. 124. Height, 0.13 m.; greatest diameter, 0.092 m.; diameter of rim, 0.049 m. A small jug, almost a bottle in shape. Standing on a flat bottom, it has a rounded body, high cylindrical neck, and a splaying rim, with one fairly broad flat vertical handle grooved on its upper side. The fabric is good — clean buff clay, with surface smoothly slipped; unfortunately it has suffered much damage. The decoration consists of the usual zone, marked off by a pair of bands above and below, in which a figure, done in broad ribbon lines and composed of a much simplified pair of connected spirals, is three times repeated. The chipping away of the surface of the pot has almost obliterated the pattern, which has, however, been intensified and made more easily recognizable in the drawing. A broad band of paint along the outside of the rim and two lines down the top of the handle complete the decoration. The flat bottom is not true, and the jug stands at an oblique angle.

No. 96, Fig. 125. Height, 0.20 m.; greatest diameter, 0.147 m. Part of one side missing. This larger jug from the west part of the hill also deserves to be illustrated here. It is a much better pot than the two preceding, showing no little care in its manufacture. It has a buff biscuit, hard and well fired; and the surface is slipped and polished. The jug has a flat base, round body, and almost cylindrical neck, which is carried up to form a spout on one side. A heavy round handle swings down from the back of the neck to the broadest part of the body.

Two ribbon bands of dull violet-black paint around the middle of the vase and a similar pair at the base of the neck mark off a zone of decoration which is divided into four metopes by groups of parallel vertical lines, alternately three and four in number. The panels, which are all of different sizes, were left blank. The band marking the top of the zone has a fine wavy line bordering it below. Two plain bands follow the line of the rim, and the front of the spout bears two finer vertical lines. A single ribbon line runs along the upper side of the handle, separating into two curved ends below.

The base is not perfectly flat, and the jug does not stand well.

II. *Fine Style.*

The material is not abundant and does not offer a great deal that is new. This class consists chiefly of small pots made on the wheel, with thin walls and pretty regular shape. The clay is most commonly greenish yellow, greenish gray, or a light buff in color. A few

¹ No. 94. Ht. 0.07 m.; greatest diameter, 0.08 m.; D. of mouth, 0.075 m. Coarse pinkish clay; greenish gray slip.

typical sherds are illustrated in Figure 126. The patterns are simple enough, mostly linear with some geometrical figures, again spirals, diamonds, etc., and occasionally more ambitious efforts to represent birds (Fig. 126, No. 7) or flowers. This ware differs not a little

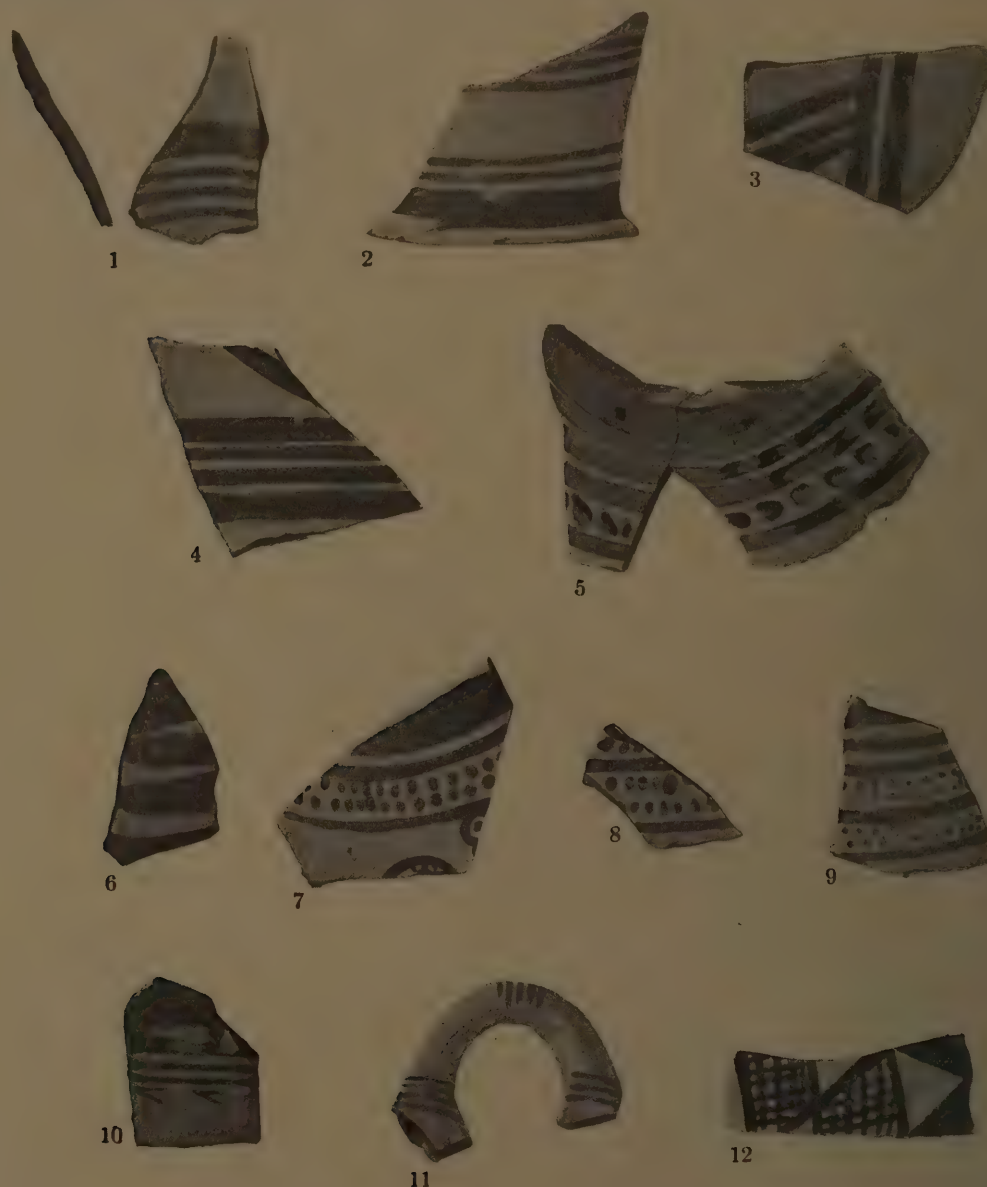


FIGURE 126. TYPICAL SHERDS, MATTPAINTED WARE, CLASS II

from that of Class I in its style of execution; the lines are much finer and the whole effect is more delicate. Though occasionally a pot of intermediate style may come to light, it is usually easy to distinguish the two at a glance. The jug described above (No. 96) might perhaps be regarded as such a transitional piece.

The shapes recognizable from the fragments include cups of four distinct kinds: vessels with flat bottom, slightly outcurving sides, and a single vertical handle (Keftiu shape;

Fig. 126, No. 1); similar cups, but with incurving sides, relatively smaller bottom, and a raised base (Fig. 126, No. 2); goblets on a stem (Fig. 126, No. 3; cf. Furtwängler and Löschcke, *Mykenische Vasen*, Pl. XXIV, Figs. 176 and 177); and round-bottomed cups with a side handle (a handle, Fig. 126, No. 11; a complete cup, PLATE XIV, No. 2). Several spouts seem to belong to small jugs, and fragments of necks (Fig. 126, Nos. 5 and 7) are no doubt from vessels of the same kind.

Three complete pots from Tomb XXII fall into this class and may be described here:

No. 304; PLATE XIV, No. 3. Height, 0.153 m.; greatest diameter, 0.12 m.; diameter of mouth, 0.087 m. This is a small jug which has a clumsily made raised base, fairly well formed body, broad neck and wide mouth, and the usual curved strap handle. At the point where the latter joins the rim is a flattened "rivet head." The pot is made of pretty well sifted greenish gray clay and is adequately fired. The surface is slipped and smooth, but not polished. The decoration is carried out in dull black paint, a simple band of which runs around the base and the rim. The regular zone on the upper part of the body is delimited above and below by three bands, the central one being much broader than the other two. The zone itself is empty of decoration except for a row of carelessly applied hooks or dashes just below the upper border. Along the top of the handle are two broad bands of paint which terminate abruptly at the lower end of the handle.

This jug was found in Tomb XXII, with its mouth still tightly closed by the stem of a Yellow Minyan goblet, which had been made to serve as a lid.

No. 305; PLATE XIV, No. 1. Height, 0.088 m.; greatest diameter, 0.082 m.; diameter of opening, 0.06 m. A small jug, similar to the preceding in shape, made of fine pinkish buff clay, with very thin walls, well shaped and well baked. The surface was originally coated with a slip, and smoothly polished, but is now much worn. The decoration was effected with lustreless purplish paint in fine lines, which are now very indistinct and difficult to make out; in the drawing they have been considerably intensified. There is a single narrow band along the rim; at the base of the neck are three bands, the lowest of which carries a fringe of festoons. Below this, around the upper part of the body, is a simple linear decoration consisting of four units, not symmetrically spaced, each composed of a pair of connected spirals. Apparently the lower limit of the zone was not marked by a band; and there is no further ornament save a number of oblique cross lines on the handle. The delicate fine style in which this pot is finished makes it stand out among Mattpainted vases.

No. 306; PLATE XIV, No. 2. Height, 0.052 m.; with handle (restored), *ca.* 0.08 m.; greatest diameter, 0.063 m. A small cup, similar in shape to No. 94 (Fig. 123), but of much finer fabric. It is made of well-purified greenish gray clay with thin walls, and is well baked. The loop handle rising from the rim on one side is deeply grooved. The decoration in dull black paint includes a single band along the rim, a line on the top and on each side of the handle, and the usual zone around the upper half of the body. The zone is bordered by three narrow ribbon lines below and a single broad band at the base of the neck. Around the upper part of the zone, or perhaps rather forming part of the upper border, runs a single narrow band, from which are suspended nine double festoons almost regular in size.

III. *Polychrome Style.*

There are no complete pots, and indeed only a very few sherds were found. This is far and away the best and the most interesting of the Matt-painted fabrics and it is to be regretted that the material from Zygouries as well as from other Middle Helladic sites is still

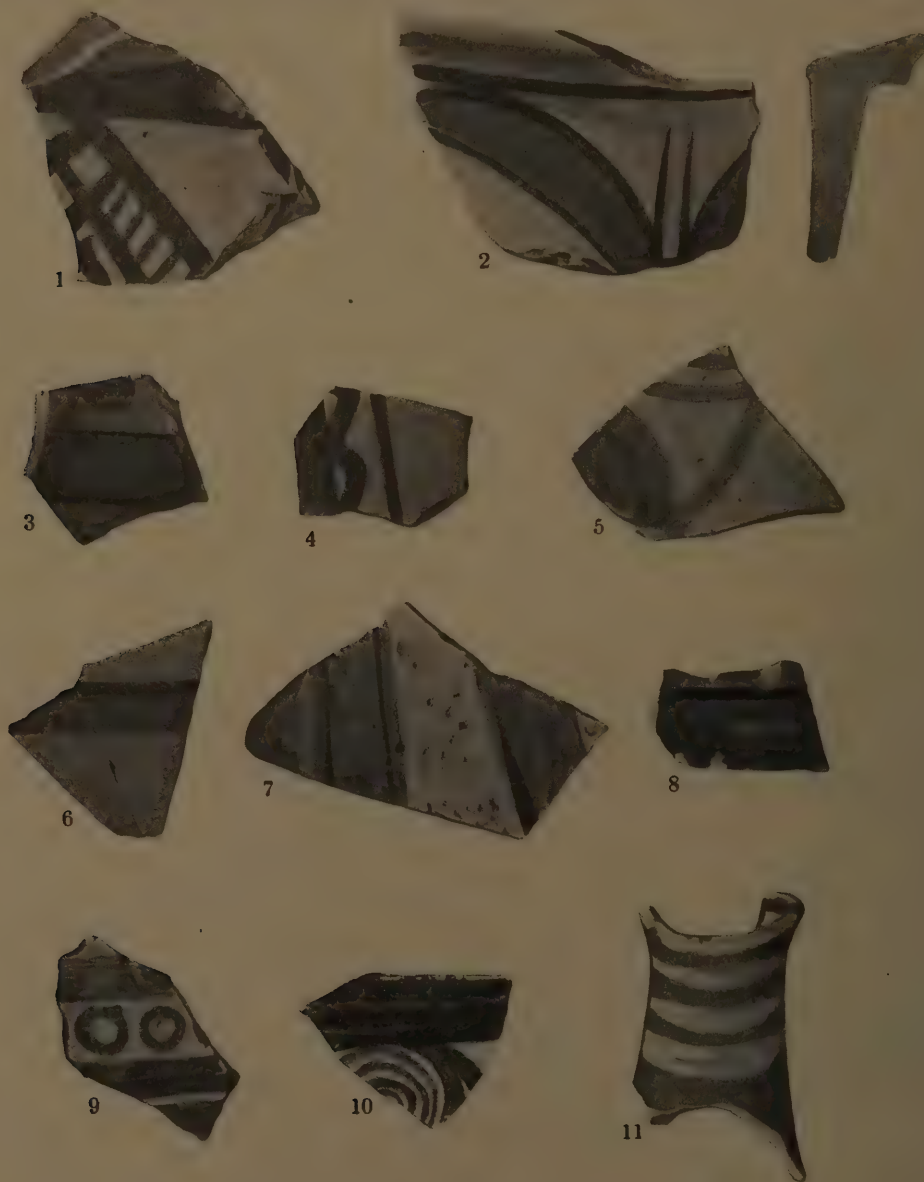


FIGURE 127. TYPICAL SHERDS, MATTPAINTED WARE, CLASS III (Nos. 1-8); AND MAINLAND WARE CORRESPONDING TO FABRICS OF M. M. III (Nos. 9-11)

so scanty. The few fragments illustrated in Figure 127 seem to represent chiefly the panelled system of decoration, which is certainly the most favored in this style. The patterns themselves are generally large figures, outlined in dull black (or gray) and filled in with red which is sometimes polished. The sherds from Zygouries give little evidence as to the nature of

these figures except in the case of Fig. 127, No. 2, where we seem to have a large lily-like flower with broad petals and a pair of stamens.

All these pieces are from large pots; No. 2 from a deep basin with broad flat rim, the others mainly from jugs no doubt resembling those found by Schliemann in the Sixth Shaft Grave at Mycenae.

C. COARSE WARE FOR DOMESTIC PURPOSES

Nothing of consequence belonging to this group was found at Zygouries.

D. MAINLAND WARE CORRESPONDING TO FABRICS OF MIDDLE MINOAN III

Not more than half a dozen sherds came to light. Three are shown in Figure 127, Nos. 9 to 11. No. 11, the spout of a small jug, is decorated in creamy white paint on a dark ground; No. 10, from an open cup or bowl, bears a well-drawn spiral in lustrous black glaze and shows also a pair of superposed lines in white; No. 9, with its extraordinarily shiny reddish glaze, recalls certain sherds of the same period from Korakou (*Korakou*, PLATE III, No. 6).

LATE HELLADIC PERIOD

In the Late Helladic Period, as already mentioned above, the settlement had apparently descended from the hill and spread out over the low ground to the east and west. Remains of houses — walls and floors, unfortunately much denuded — were found in both these quarters, accompanied by the usual broken pottery. On the hill itself, however, no evidence for any Mycenaean structures of size and importance came to light, except close to the eastern edge, where the large building, the lower story of which housed the Potter's Shop, had probably extended some distance westward across the Early Helladic settlement (Houses D, A, and the north part of the House of the Pithoi). There must have been some sort of occupation, nevertheless, for Late Helladic potsherds were found in a light scattering on or just below the surface of the ground everywhere about the hill. Some grading had doubtless been carried out in Byzantine times and the central part of the mound cut down, but it hardly seems likely that the traces could have been so thoroughly removed if the Late Helladic settlement had occupied this section at all thickly. Only along the east scarp were there well-preserved remains of substantial buildings.

The pottery as a whole is rather a mixed lot. It includes not a little fragmentary material dating from Late Helladic I and II, found chiefly along the east side of the site and in the deeper strata below the east terrace on which stood the Potter's Shop. For the Third Late Helladic Period there are also a few vases and some shattered pottery from the same region and elsewhere on the hill, and especially from the trenches in the fields on the east and west. And finally there are the twenty-two pots from the two chamber tombs, and the magnificent collection of more than 1300 vases from the Potter's Shop, forming two closed groups, each of which must be treated separately as a unit.

LATE HELLADIC I

Ware of this period was not especially abundant; only one small pot and a few sherds of vases decorated with painted designs will be shown here (Fig. 128). Nos. 1, 2, and 3, with

well-drawn spirals bearing lines and dots added in white, are from "tea cups" of a favorite Early Mycenaean form (*B. S. A.*, XXV, 1921-23, PLATE XXIII, a). Deep cups with flat bottom and slightly concave profile — the "Keftiu shape" — are also represented (Nos. 4, 5, and 6); and there is one fragment of a filler or rhyton, ornamented with the characteristically mainland type of double axe (No. 7. Cf. for the pattern, *B. S. A.*, XXV, PLATE



FIGURE 128. TYPICAL SHERDS, LATE HELLADIC I

XLVII, h). And, finally, there should be mentioned a diminutive goblet on a stem (No. 582; Fig. 128, No. 8) which with its two small loop handles is a popular shape in Late Helladic I; it is decorated with a frequently occurring linear design (cf. *Korakou*, p. 42, Fig. 57, No. 2).

LATE HELLADIC II

Pottery of this period came to light in somewhat greater quantity than that of Late Helladic I, but again the material consists only of shattered fragments, a few examples of which are illustrated in Figure 129. The Palace Style at its best is represented (Nos. 3, 4, and 5) by sherds from large jars of the amphora type, similar to those from Kakovatos, Pylos, and Mycenae. In the ivy leaves and lilies of Nos. 6, 7, and 8 we have some of the



FIGURE 129. TYPICAL SHERDS, LATE HELLADIC II



FIGURE 130. TYPICAL SHERDS, EARLY LATE HELLADIC III

favorite naturalistic motives of Late Helladic II. The large fragments (Nos. 1 and 2) belong to typical deep bowls of the period, carrying a heavy "wave" border in solid color just below the rim. The three-petalled flowers of No. 2 are no doubt a conventionalized adaptation from the Palace Style and may well have been borrowed from a vessel such as that from the Tomb of Aegisthus at Mycenae (*B. S. A.*, XXV, PLATE L, a).

Ephyraean Ware was likewise represented by a good many small pieces, a selection of which is offered in PLATE XV. The usual motives occur here, lilies, nautilus, rosettes, etc., and these vases are identical in fabric with those from Korakou and elsewhere. Unfortunately only one of these attractive goblets was sufficiently preserved to permit a restoration.

No. 276, PLATE XV. A small goblet, restored (in the drawing by Mr. DeJong) from ten fragments; the base and one side are missing. Diameter, *ca.* 0.13 m. Fine pinkish buff clay; smooth buff slip. The decoration, carried out in reddish brown paint, much damaged and worn, consists of a large rosette with sixteen petals springing from a central ring; one such rosette is placed well up on the side midway between the two handles, and there is no doubt that the other side, which is missing, was similarly ornamented. At the base of each handle are three wavy parallel horizontal lines, and the goblet has no further decoration.

LATE HELLADIC III

We come now to Late Helladic III, and before we take up the groups from the Potter's Shop and the chamber tombs a few words need be said about the pottery found elsewhere on the site. As appears from the illustrations, the usual Third Late Helladic types are represented. Among these sherds those shown in Figure 130 (Nos. 1 to 5) clearly belong to the early part of the period, being very similar to the ware found in the *dromos* of Tomb 505 and elsewhere at Mycenae, technically of extremely good fabric, and decorated, though with decadent patterns, it is true, in glaze paint of excellent quality. No. 1, a broad cup, with its flat bottom and slightly concave sides terminating in a plain rim, may be ultimately derived from the "Keftiu shape," and its decoration looks like an advanced step in the conventionalization of the pattern of ivy leaves so naturalistically rendered in Late Helladic I and II.

The examples illustrated in Figure 131 (Nos. 1 to 12) must no doubt for the most part be assigned to a slightly later date, an intermediate stage in Late Helladic III, perhaps not a great deal later than the foregoing. Here are included a few pieces (Nos. 1, 2, and 3) on which added white patterns are used to accentuate the decoration; for this technique, so common on early ware of Late Helladic I, was revived in the course of Late Helladic III, though not in the same delicate style; and specimens are known from other Mycenaean sites (cf. *B. S. A.*, XXV, p. 43, Fig. 11, a). The other examples shown are quite similar, both in shapes represented and in decoration, to the intermediate wares from Mycenae and call for no special remarks. No. 10, a fragment from the side of a deep bowl, with its crudely drawn fantastic animal, recalls the "circus pot" from Tomb 521 at Mycenae,¹ which it matches very closely in style.

The very latest type of Third Late Helladic Ware, the so-called "Granary Class," differentiated by Wace at Mycenae (*B. S. A.*, XXV, pp. 40 f.), was not abundantly

¹ To appear in Mr. Wace's forthcoming publication of the Tombs in *Archaeologia*.

represented at Zygouries, though there were a few fragments of deep bowls similar to the latest vessels of that shape among the house deposits at Korakou (*Korakou*, p. 61, Fig. 85), which are contemporary with the Granary Class (cf. *B. S. A.*, XXV, p. 47, PLATE V, f.).

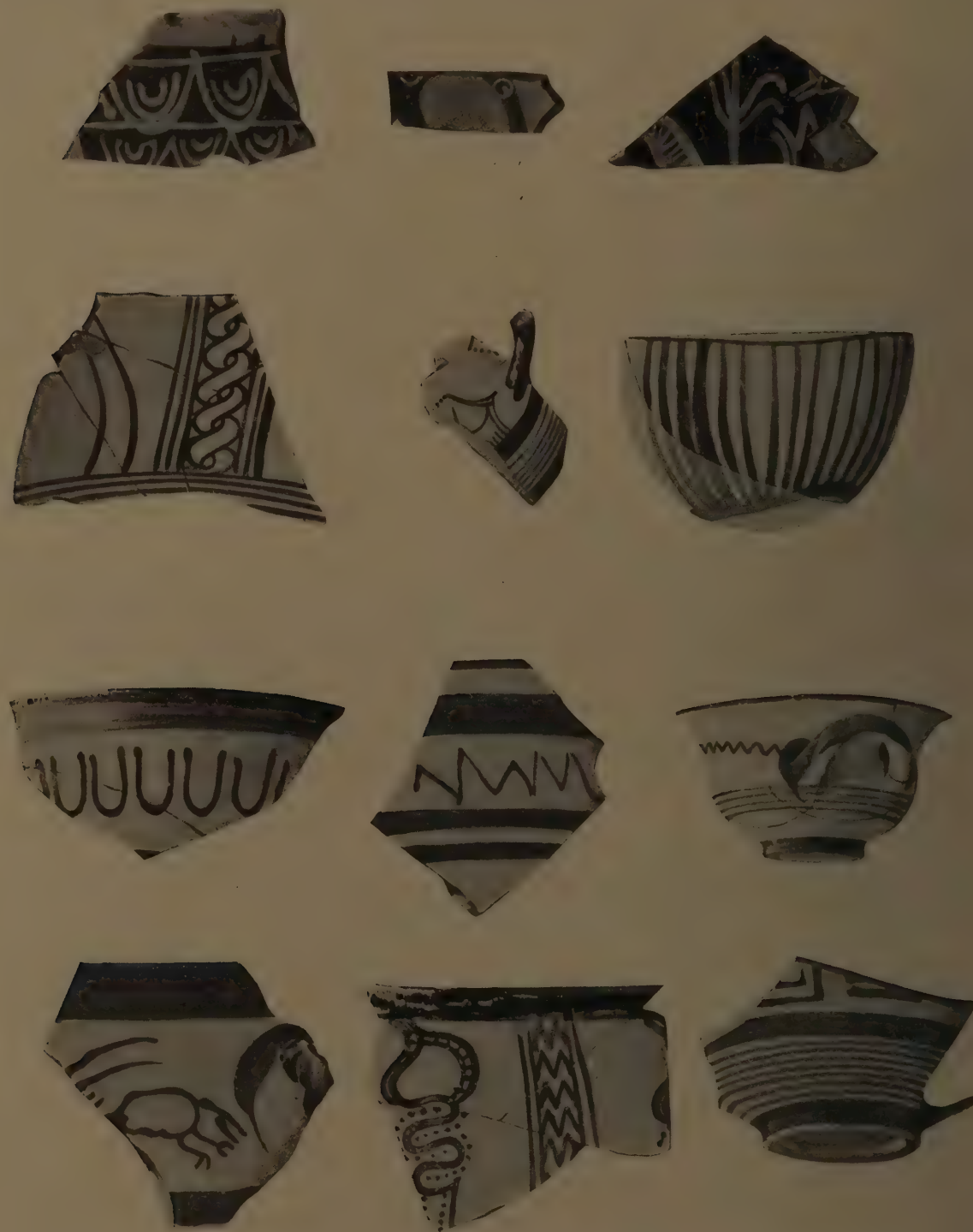


FIGURE 131. TYPICAL SHERDS, LATE HELLADIC III

Three pots, more or less nearly complete, were found in a trench dug through the fields to the northwest of the site, apparently belonging to the deposit on the floor of a house. They seem to fit into the intermediate stage.

No. 313 (no illustration).¹ Height, 0.143 m.; greatest diameter, 0.126 m.; diameter of mouth, 0.093 m. A small, well-formed jug with two handles, almost exactly similar in shape of body to the plain jugs with one handle from the Potter's Shop. In the present instance the handles are of a distinctly different type, since they join the neck below the rim. The



FIGURE 132. TWO LARGE STIRRUP VASES, LATE HELLADIC III

jug is simple, decorated with broad bands of red paint. It is of good fabric and originally had a smoothly slipped surface, which is now badly weathered.

No. 311, Figure 132.² Height, 0.408 m.; greatest diameter, 0.32 m. A large stirrup vase with flat base, regularly oval body, and a relatively enormous spout. The shape is quite different from that found in the Potter's Shop and by no means so pleasing. The body is more elongated, the stirrup handle is higher, and the spout relatively much larger. The decoration is simple, consisting of the familiar horizontal belts of lines, and in the upper zone, thus marked off, a broad serpentine band running around the vase. The handles bear parallel lines along each edge, and on the disk two broad bands form a rude cross within a circle; while the base and rim of the spout are also marked with a band.

¹ No. 313. Fine pinkish buff clay, smooth surface, with buff slip, much worn away.

² No. 311. Pink clay, well cleaned and well fired; buff slip. The bands on the body seem to have been painted while the pot was revolving on the wheel.

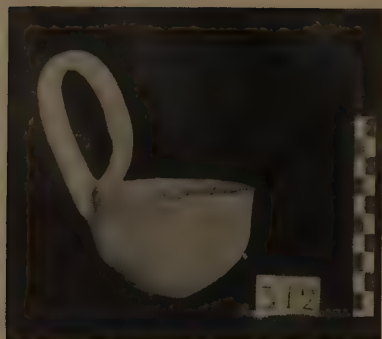


FIGURE 133. PLAIN CUP WITH HIGH HANDLE, LATE HELLADIC III

No. 312, Figure 133.¹ Height, 0.06 m.; including handle, 0.13 m.; diameter, 0.079 m. A small plain cup or "dipper" with a high loop handle. It is rather thick and heavy, but of good fabric. The cup has an almost pointed bottom and is quite different in shape from the scoops found in the Potter's Shop.

There remains to be mentioned a large bath found on the floor of a late Mycenaean house which came to light near the bed of the stream in the low ground east of the hill. Unfortunately the vessel (No. 581, Fig. 134)² is incomplete, no piece of the rim being preserved, and its original depth cannot be determined; the preserved depth is 0.30 m. Measured on the bottom inside, the bath is 0.695 m. long and 0.316 m. wide. The sides splay outward and the ends are rounded. The walls have a thickness varying from 0.01 m. to 0.02 m., and the biscuit naturally shows a rather coarse clay. No bath of Mycenaean date from other sites on the mainland seems available for comparison.

¹ No. 312. Clean pink clay; buff slip which has become powdery.

² No. 581. Coarse clay, gray at core, buff at surface; cream-colored slip, mostly worn away.



FIGURE 134. LARGE BASIN OR BATH, LATE HELLADIC III, No. 581

THE POTTER'S SHOP

The material from the Potter's Shop, which has been so frequently mentioned in these pages, represents a stock of at least 1,330 vases of twenty different shapes. Some sixty-five of these were found intact, approximately two hundred more have been put together as completely as might be; the remainder still lie in the fragments to which they had been reduced by the mass of débris which crashed down from the story above at the time the building was destroyed by fire. Of the pots from Room 13 and Room 33 all the fragments are preserved, and some further hundreds of vases could still be reconstituted by a mender with unlimited time and patience at his disposal. So far as the study of the pottery and the evaluation of the contents of the building are concerned, however, nothing further is to be gained by the restoration of endless duplicates, and this has consequently not been attempted. The material from Room 12, which contained the painted cylixes, was unfortunately not so complete, since the scarp of the hill cut through the middle of the room and much of the original contents had been carried down the slope.

All the vases found in the building were clearly in unused condition, and some of the intact examples looked, when washed, as fresh as though they had been made yesterday. The number of pots with painted decoration was relatively small; the bulk of the stock comprised domestic utensils without ornament. In the following description we shall begin with the painted specimens.

Painted Ware

1. The cylixes (PLATES XVI, XVII, and XVIII) were found chiefly in a great mass lying close against the west wall of Room 12. The painted examples are of excellent fabric; made of clean buff clay, which ranges from pinkish to greenish in tone, they are well shaped and well baked, though sometimes warped in firing because of their thin walls (or perhaps they are misshapen because of sagging during the time they were drying before being baked). The surface is covered with a good slip and often smoothly polished; in some cases, however, the slip has become powdery and wears away easily.

No two are identical in size and proportions; for comparison the dimensions of four representative specimens may be given:

No. 46. Height, 0.170 m.; diameter, 0.164 m.; diameter of base, 0.082 m.

No. 47. Height, 0.186 m.; diameter, 0.175 m.; diameter of base, 0.081 m.

No. 49. Height, 0.199 m.; diameter, 0.167 m.; diameter of base, 0.082 m.

No. 67. Height, 0.174 m.; diameter, 0.151 m.; diameter of base, 0.08 m.

Of these examples No. 46 is the smallest and No. 49 the largest in the whole collection. The shape is, however, practically uniform in all cases: the cylix has a large foot, flat underneath, but with a deep circular hollow at its centre; and a high slender stem increasing in diameter as it rises; the body of the vessel first spreads out widely, then curves sharply upward to a neat rim. The rim is sometimes merely rounded off toward the exterior, sometimes has a sort of delicate flange on the outside. There are always two half-round vertical loop handles.

The patterns are executed in glaze paint of an excellent quality, red, brown, or black in color, or on some vases a combination of all three, one shading gradually over into another. The pattern is in every case painted on one side of the cylix only; this side was no doubt intended to be held away from the lips by the person drinking from the cup. The other side, which would not be visible to spectators, had no need of ornament and in accordance with this unvarying spirit of economy on the part of the potter, is always left without decoration. This principle of limiting the design to one side of a cup is not new at Zygouries, but was practised at many other places and in other periods (cf. *Phylakopi*, p. 114, panelled cups in the pre-Mycenaean Melian curvilinear style; also *Korakou*, p. 25, Matt-painted Ware).

The design, which, whatever its nature, seems always to have been treated as a unit, is never repeated, but occurs only once and was clearly regarded as sufficient decoration for the side of the vase. In the case of the murex pattern, it is true, one pair was not always felt to be adequate; three shells often occur (Fig. 135, No. 2) and more rarely even four (Fig. 136, No. 6); but the unity of the whole design does not appear to have been lost from sight. This sparing use of decoration, which is further emphasized by the absence, without exception, of the painted bands so frequently employed in this period on the base, rim, and handle, is certainly due to deliberate restraint — a rather remarkable phenomenon in Late Mycenaean pottery. The general style of the decoration reminds one, even though distantly, of Ephyraean Ware: there is the same chary use of paint, the same freedom from the fear of leaving empty spaces, the same employment of a design which might be said to form a single unit. Ephyraean Ware flourished at its best in Late Helladic II, and the sherds illustrated in PLATE XV are clearly of that date; but examples are known which certainly carry the style down to the beginning of Late Helladic III (some specimens from early excavations at Cnossus which must be assigned to Late Minoan III are exhibited in the Museum at Candia; cf. *B. S. A.*, VI, 1899–1900, one sherd, p. 74, Fig. 18). Is it merely fanciful to see in these cylixes from Zygouries a still later survival of the same tradition?

The mass of sherds recovered from Room 12 contained remains of at least seventy of these painted cylixes; but, as remarked above, much of the deposit in this room had been washed down the hillside, and it proved possible to put together only twenty-three examples in approximately complete condition. The painted side was, of course, preserved in many further instances, and the material is adequate for an interesting study of the development of patterns. The patterns which appear are fairly simple and, though a lively variety is produced by differences in arrangement and combination, may be traced back essentially to fewer than half a dozen basic motives. Indeed the great majority are clearly derived from two alone, namely, the murex and the octopus, though they appear in a much degenerated form.

The murex is the commonest of all the patterns, occurring on fully half the total number of cylixes found. A frequent arrangement shows a simple pair of these marine creatures as illustrated in Figure 135, No. 47; sometimes, perhaps, in order to make the design larger, the space between the two is widened and filled out with a few dotted circles, or with a vertical chain of loops, or some other border pattern (Fig. 136, 1 and 2). Occasionally two shells have been combined into one body with double extremities, as in Figure 136, No. 3.



FIGURE 135. TWO GOBLETS, LATE HELLADIC III, NOS. 47, 62, FROM THE POTTER'S SHOP

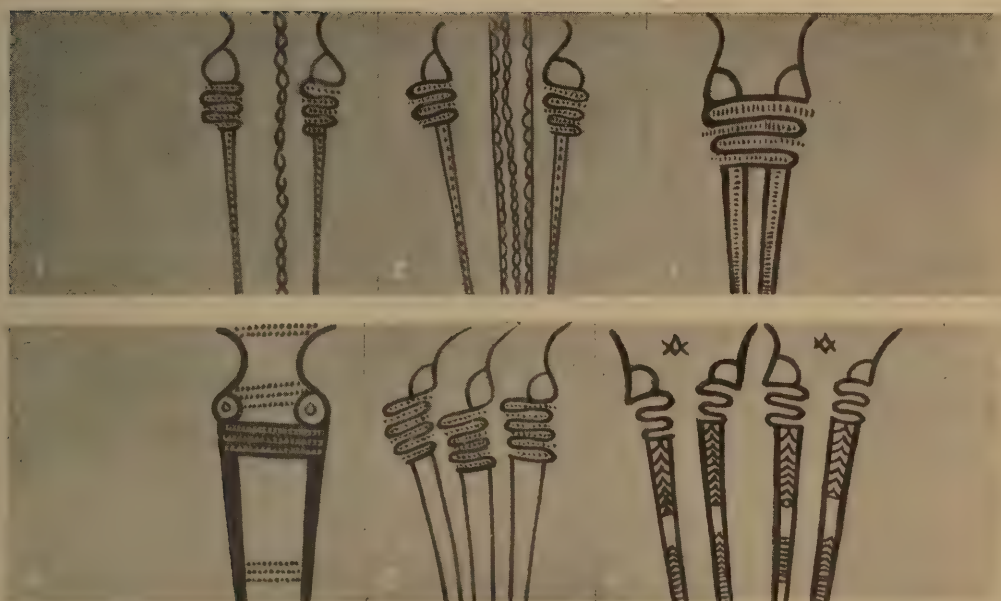


FIGURE 136. VARIETIES OF MUREX DESIGN ON GOBLETS, FROM THE POTTER'S SHOP

A similar combination, shown in Figure 136, No. 4, appears to have another element added, which will be discussed below.

In a good many cases three murexes are represented side by side, sometimes all alike in a row (Fig. 136, No. 5), sometimes two symmetrically forming a pair, with the third added at one side (No. 62, Fig. 135). Rarely as many as four appear in the same design (Fig. 136, No. 6).



FIGURE 137. DEGENERATION OF OCTOPUS DESIGN ON GOBLETS, FROM THE POTTER'S SHOP

The long lower extremity of the murex is treated in a variety of ways. Sometimes it is left plain; more usually it is marked either by a vertical row of dots or strokes, by wavy horizontal dashes, or by chevrons one above the other, forming a sort of herring-bone pattern (Fig. 136, No. 6). This latter is worth noting, because it seems to have developed from a subsidiary motive, employed for filling ground, into a full-fledged main design on a few cylixes such as that shown in PLATE XVI (No. 45). At least no other explanation suggests itself readily and the connection with the murex looks convincing.

The second basic motive, derivatives of which may be recognized on many of these vases, is the octopus. It is certainly a far cry from the realistic devilfish on certain pots of Late Helladic II (such as the jar from the Argive Heraeum,¹ etc.) to the much debased type

¹ *A. J. A.*, XXIX, 1925, p. 425; found during the excavations of 1925.

represented here, but the family connection is unmistakable. It betrays itself chiefly in the eyes, by which it may be followed through many stages on its path of degeneration. The examples which have been assembled in Figure 137 illustrate well the passing of the octopus. In Nos. 1, 2, and 3 he is still easily recognizable, though his body has become a mere convention; the tentacles are still preserved, though the upper pair on each side have been joined into a single broad one; and the large eyes, each with its pupil clearly indicated, bespeak their origin in no uncertain terms. In Nos. 4 and 5 we have reached a more advanced stage: the upper tentacles have disappeared and have been replaced by a formal tripartite pattern of concentric half-circles; the lower pair of arms on each side have been combined into one, but the eyes still remain, as circles enclosing a large dot, quite meaningless in their present context. In No. 6 the circles have been moved close together and have lost their dots; in No. 7 they have become spirals, incorporated fairly successfully in the main design. Nos. 8 and 9, finally, represent a development in a different direction, perhaps a more direct line, in which the upper tentacles are retained. In No. 8 the eyes have been flattened out into oval open spaces with no especial *raison d'être*; and in No. 9 they appear again as spirals resembling the volutes of an Ionic column, and here the lower tentacles have been omitted. In all these later stages the origin of the motive would hardly be suspected if it were not for the intervening phases.

The octopus seems also to have affected the double murex mentioned above (Fig. 136, No. 4), for here again we have a reminiscence of the prominent eyes. It may be doubted whether the potter or the painter of the vase realized that in these degenerate forms he was drawing an octopus or that his pattern had anything to do with an octopus; presumably it was to him nothing more than a conventional decorative design, copied so often that its origin had been quite forgotten.

Independent motives other than the two discussed in such detail are very few. The pattern on No. 48 (PLATE XVII), of which a second example was found, certainly has a different origin. The roots at the bottom and the knotty stalk indicate clearly that the ancestry of this conventional plant must be sought, far earlier, in the palm design on vases of the Palace Style; a comparison with the fragment illustrated as No. 3 in Figure 129 above, or with the design on a large jar from one of the bee-hive tombs at Kakovatos (*Ath. Mitt.*, XXXIV, 1909, PLATE XXII, 2) should be convincing. A further adaptation of this pattern may possibly be recognized in the curious cross-hatched figure decorating cylix No. 63 (PLATE XVIII), though here the two side tentacles suggest that there has been a fresh complication through the addition of elements borrowed from the octopus design.

The graceful shape of these pots (when not too badly warped), the fresh colors, and the deft hand with which the patterns, despite their obviously debased character, are treated, all contribute to make these cylixes from Zygouries a singularly attractive group, standing out distinctly among vases of the same general shape in the Third Late Helladic Period.

A few examples in the same style are known from other Mycenaean sites: so, for example, in a cylix from Kalymnos now in the British Museum (*Catalogue of Vases*, Vol. I, Part 1, Pl. XV, A 1008) we have exactly the same shape and the same type of patterns; specimens have also been recognized at Mycenae (*B. S. A.*, XXV, p. 108) and at Aegina ('Εφ. Ἀρχ., 1910, Pl. VI, No. 5); also at Ialysus (Furtwängler and Löschcke, *Myk. Vasen*, Pl. XI, 72).

2. From the same mass of sherds which produced the painted cylixes came a single example of a jar with three handles, of a kind usually known as the "amphora type," No. 50, PLATE XIX.¹ Height, 0.21 m.; greatest diameter, 0.21 m.; outside diameter of mouth, 0.118 m.; of foot, 0.07 m. This is a small elegantly shaped jar with a flat ring-base, hollow underneath, and a shapely body rising from a slender stem; the broad neck splays outward to end in a wide mouth. On the upper curve of the body are three vertical loop handles, not spaced with absolute symmetry. The technique is excellent and the vase has a smoothly slipped surface.

The decorative medium is a good brown glaze, deepening here and there to black. The ornament consists of broad bands around the stem, with fine parallel lines between; an



FIGURE 138. STAND FOR COOKING POT, No. 523,
FROM THE POTTER'S SHOP

upper zone, which is marked off by similar bands, is bordered by festoons above and below, and carries as a central feature a horizontal belt of irregular circles. Some of these circles were made with one stroke of the brush, which resulted in overlapping ends; others were made with two half-circular strokes, overlapping twice. Above the upper band, bordering the zone, is a belt of four fine lines, then comes a solid coat of color covering the exterior of the neck. The top of the rim is unpainted, but there is a broad band inside along the edge. The handles are coated with paint, and their attachment to the body of the vase is encircled by a ring. This simple decoration is reminiscent of the style found at Tell el Amarna, but the system of broad bands and fine lines is a familiar one almost throughout the whole of Late Helladic III.

¹ No. 50. Finely levigated buff clay, smooth buff slip. The bands are very regular and even and were evidently carefully painted while the pot revolved on the wheel.

3. From Room 30 came a stand or support for a cooking vessel, likewise the only example of its shape from the Potter's Shop, No. 523, Fig. 138. Height, 0.15 m.; diameter at top, 0.153 m.; at bottom, 0.20 m. The stand is hollow, with a doubly curved profile and a flat rim sloping inward. It has no bottom; the sides are cut out so that they form three broad legs; they are somewhat misshapen as a result of accidents in firing, and their curve does not form a perfect circle. The vessel is, however, very well made, of fine pinkish buff clay, thoroughly baked, and has a smooth, slipped surface. The decoration is of the simplest, consisting merely of horizontal bands and a brush-line around the three arched openings in the side, all done in excellent red glaze-paint.

The stand looks as if it were intended to support a small cooking pot over a charcoal fire, for which the openings in the side would provide sufficient air. But the excellence of the fabric is in contrast with the rather coarse finish of the cooking vessels themselves.

4. In Room 13 were found ten large, and three huge stirrup vases. Though made of unpurified clay, and having fairly thick walls, they are on the whole extremely well shaped, indeed with a touch of refinement in their lines. This shows itself especially in the slender base and the double curve of the side rising from it to the full swelling body of the pot. A stirrup vase offers at best an awkward problem to a potter who wishes to make his product graceful; it seems to me that little more could be done in this direction than has been achieved, despite the heavy fabric, in these ten smaller vessels from Zygouries. A comparison of No. 371 and the rather ugly oval pot (No. 311), with its disproportionately large spout and ungraceful flat base, found on the floor of the Mycenaean house west of the hill, illustrates what I mean (Fig. 132).¹

These ten smaller vases are almost of a size, as may be seen from the following measurements showing the greatest variation:

No. 370, Fig. 139. Height, 0.36 m.; greatest diameter, 0.32 m.

No. 371, Fig. 132. Height, 0.382 m.; greatest diameter 0.322 m.

No. 369 (No illustration). Height, 0.39 m., greatest diameter 0.332 m.

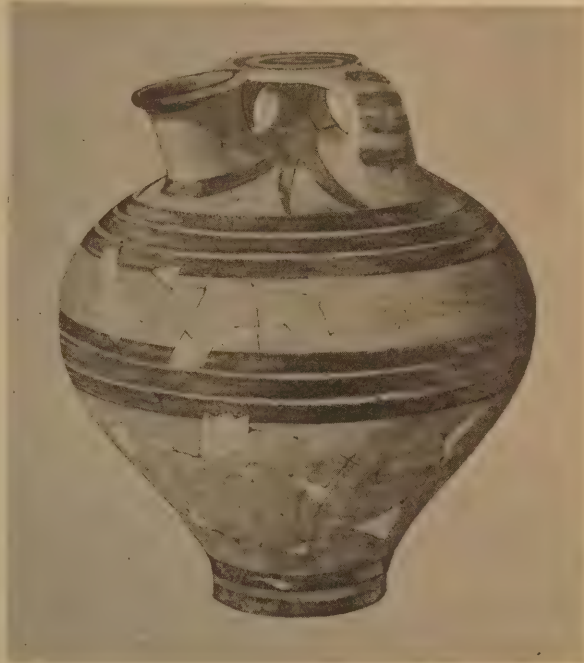


FIGURE 139. STIRRUP VASE, NO. 370, FROM THE POTTER'S SHOP

¹ In all these vases the top of the spout is about horizontal and rises to approximately the same level as the top of the disk of the handle — in a few instances a trifle higher. In No. 311 the top of the spout is much lower than the disk of the handle and is set with a distinct slope.

No. 370 is the smallest of all and has also slightly the broadest base; No. 371 (Fig. 132) is among the largest; and No. 369 is the largest of all.¹

The decoration is simple and practically identical on all ten pots. All have three belts of broad bands, one just above the base, one at the widest part of the body, and one at the shoulder; the only variation is that in some cases the middle belt consists of only two instead of the more usual three bands. The spout always has a ring of paint around the lip, and

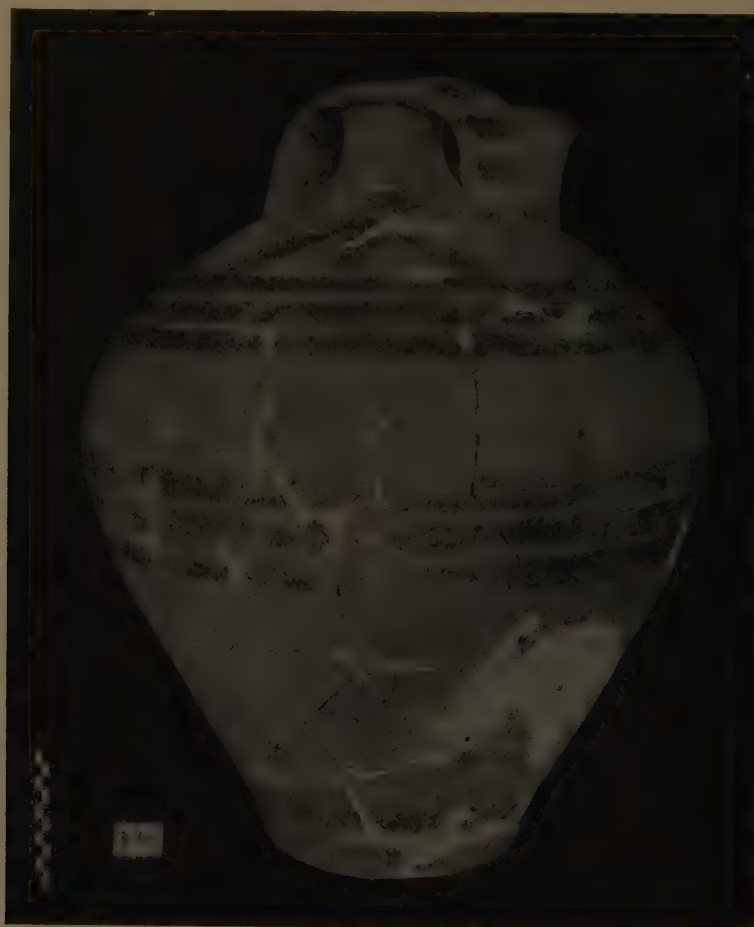


FIGURE 140. HUGE STIRRUP VASE, No. 378, FROM THE POTTER'S SHOP

the handle on each side regularly bears a series of from three to six broad horizontal strokes. On the disk at the top of the handle is most frequently a spiral; but sometimes it carries two concentric circles about a dot. The upper part of the pot above the uppermost belt of lines is decorated in all cases exactly alike. Between the handle and the spout on each side is a simple three-petalled flower pointing downward, so arranged that one petal from each side continues around the base of the spout, usually forming a ring. (In two cases the

¹ No. 370. Greenish buff clay—greenish on one side, more nearly buff on the other; not meticulously levigated. Slip of same color. Glaze red, shading to brownish black on the green side.

No. 371. Buff clay in quality like that of No. 370. Reddish brown paint.

No. 369. Good pinkish buff clay, smoother than that of No. 370 and No. 371. Red paint shading to brown.

petals from each side do not actually meet.) On the other side of the handle, away from the spout, are two similar flowers.

On some vases the paint is mainly red, on others mainly black; but both generally occur on the same vase, the color changing from side to side, though not in accordance with a premeditated plan.

The three huge pots are closely similar to the smaller in proportions and decoration, differing only in size. The largest of all has a height of 0.60 m. and a diameter, at its widest, of 0.485 m. The smallest of the three is 0.553 m. high and measures 0.473 m. in diameter (No. 373, Fig. 140).¹

The huge, thick handles are perforated at top and bottom and sometimes in the middle by numerous small holes — presumably to allow the biscuit to be thoroughly baked. In the case of the ten smaller vessels there are usually two holes each at top and bottom, sometimes only one, and occasionally none.

Unpainted Ware

1. The great majority of the cylixes came from the deposit along the west wall of Room 12, which, as already remarked above, was probably only a small part of the original contents of the room. Much had certainly been carried down the hill toward the east, and for this reason the material was not so complete as that from the other rooms in the building. Forty-four cylixes were put together more or less nearly complete; but a count of the stems made it clear that the total number of pots of this shape in the deposit reached three hundred, to which must be added fifteen specimens from the adjoining rooms of the shop.

From the technical point of view they are very well-made pots. The clay, which is usually gray, greenish buff, or buff in color, was carefully levigated; the walls are often extremely thin; and the vases were thoroughly fired. During the process of manufacture a good many were more or less distorted in shape, partly no doubt on account of the thinness of their walls, and partly perhaps because, when great numbers were fired together, they had to be packed so closely in the kiln that they sometimes damaged one another by contact. The surface is coated with a good slip, and in the buff examples, which are much the best, is especially smoothly finished, in many cases having a beautifully uniform polish. The foot is slightly concave underneath and has a deep circular hole at its centre under the stem. There are three distinct varieties of shape:

a. This is similar to the painted cylixes, with a graceful inward curve at the shoulder, two vertical loop handles, and a rim rolled slightly outward (Fig. 141).² It is the commonest shape and occurs in a fairly wide range of size and proportions. The tallest example has a height of 0.181 m. and a maximum diameter of 0.172 m.; the smallest is 0.147 m. high and has a diameter of 0.168 m. Other proportions are represented by a height of 0.169 m. to a diameter of 0.172 m.; and a height of 0.16 m. to a diameter of 0.182 m. In almost all cases the greatest diameter slightly exceeds the height. The circular foot also varies in its

¹ No. 373. Coarse clay, greenish yellow at surface, pinkish at core; buff slip.

² No. 453. Ht. 0.160 m. to 0.165 m.; D. 0.170 m.; D. of base, 0.079 m. Fine pinkish gray clay. Greenish gray slip which has become somewhat powdery.

No. 452. Ht. 0.168 m.; D. 0.175 m.; D. of base, 0.078 m. Fine grayish buff clay; buff slip.

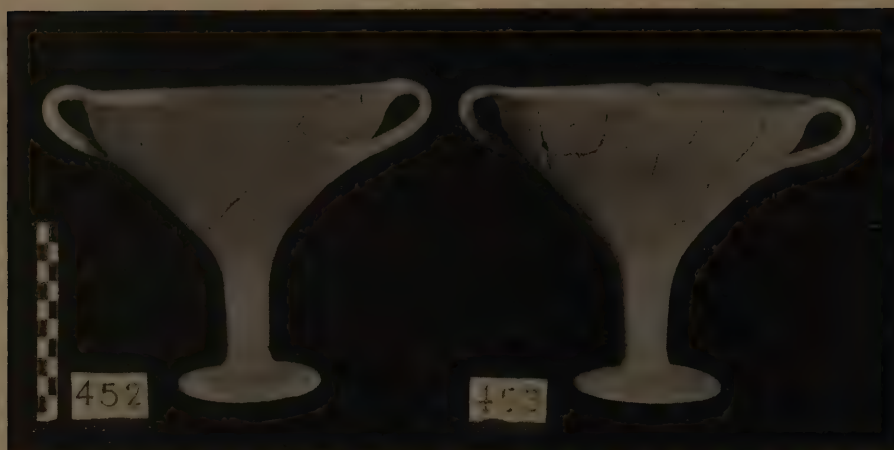


FIGURE 141. TWO PLAIN GOBLETS, TYPE *a*, FROM THE POTTER'S SHOP

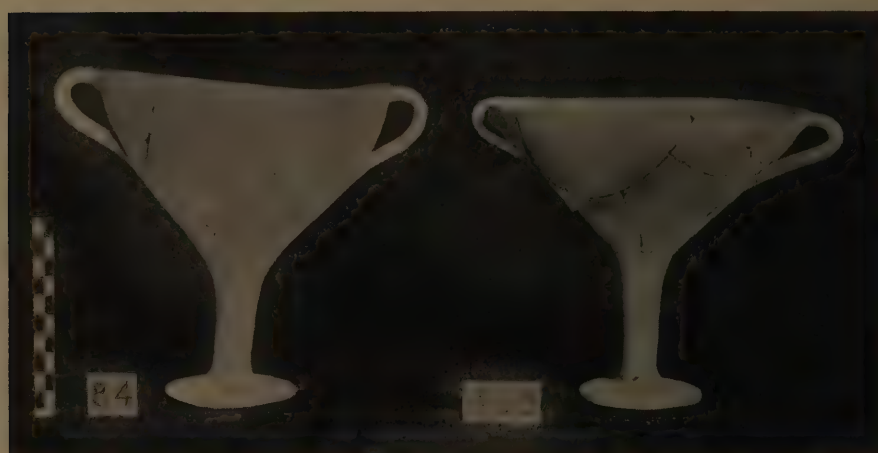


FIGURE 142. TWO PLAIN GOBLETS, TYPE *b*, FROM THE POTTER'S SHOP

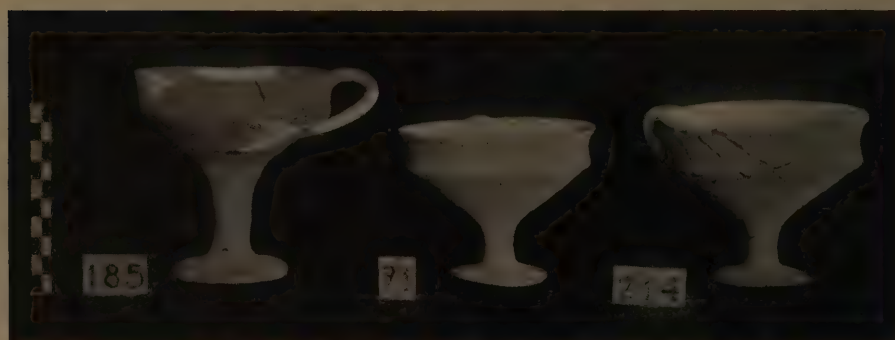


FIGURE 143. THREE PLAIN GOBLETS, TYPE *c*, FROM THE POTTER'S SHOP

proportions, but not to a noteworthy extent; among the examples preserved it ranges in diameter from 0.07 m. to 0.084 m.

b. The second type, which is almost as common as the first, differs from it chiefly in not having the graceful curve at the shoulder (Fig. 142).¹ The body, which spreads broadly, is more funnel-shaped, and the profile from the top of the stem to the lip is almost a straight line. The rim usually has no outward roll, but merely comes to a thin, almost sharp, edge. The two loop handles are of the same kind as in group *a*. This is a regular form of the Mycenaean cylix, familiar at practically all sites dating from Late Helladic III (*Korakou*, p. 66, Figs. 94 and 95; *B. S. A.*, XXV, 1921-23, Pl. X, *c*).

These cylixes at Zygouries do not differ markedly in size, but there is considerable variety in the proportions. The two tallest examples are 0.172 m. high; one has a diameter of 0.163 m., the other 0.176 m. The shortest specimen measures 0.152 m. in height and 0.172 m. in diameter. Other proportions of height to greatest diameter, examples chosen at random, are 0.165 m. to 0.169 m., 0.160 m. to 0.170 m., 0.170 m. to 0.161 m. Here, too, the height is usually slightly less than the diameter of the cup. The foot is relatively smaller in this type than in type *a*, having a diameter *ca.* 0.01 m. less on a pot of the same height; the measurements range from 0.064 m. to 0.07 m.

c. The third type of cylix was far less numerous than the other two. It is a much smaller vessel with only one handle; the body has a sharp angle at the shoulder, then rises in a reverse curve to the rim, which is rolled outward (Fig. 143).² Among the examples put together the largest (No. 185) is 0.111 m. high and has a diameter of 0.11 m.; the smallest (No. 91) has a height of 0.085 m. with a diameter of 0.105 m.

2. About twenty cups with a single high handle were found in Room 12, only three of which have been restored. The cup (Fig. 144)³ is a simple bowl on a flat base, with a huge broad, ridged handle extending in a loop high above the rim on one side. The weight of the handle makes it impossible for the cup to stand on its base; perhaps it was hung up by the loop. String marks usually appear on the bottom, showing how the vessel was cut off from the wheel when shaped. An average cup measures 0.065 m. high and 0.125 m. in diameter; the handle rises to a height of 0.15 m.

3. Several small, flat, spreading cups of no uniform shape are for convenience grouped together here. One has an almost straight line of side (height, 0.038 m.; diameter, 0.109 m.); one has a broadly splaying body which curves inward again toward its plain rim (No. 403; Fig. 145, No. 1; height, 0.043 m.; diameter, 0.115 m.); and a third is like the second, but has a rolled rim (No. 450; Fig. 145, No. 2; height, 0.034 m.; diameter, 0.092 m.).

4. In Room 13, near the southeast corner, were found approximately one hundred examples of small shallow saucers, or lids, about one-fourth of which were removed intact.

¹ No. 463. Ht. 0.160 m.; D. 0.169 m.; D. of base, 0.064 m. Fine pink clay, smooth pinkish buff slip.

² No. 185. Ht. 0.111 m.; D. 0.11 m.; D. of base, 0.062 m. Fine pinkish clay, buff slip.

No. 91. Ht. 0.085 m.; D. 0.105 m.; D. of base, 0.053 m. Fine buff clay, buff slip.

No. 214. Ht. 0.09 m.; D. 0.11 m.; D. of base, 0.055 m. Fine buff clay, buff slip.

³ No. 87. Ht. 0.067 m.; with handle, 0.15 m.; D. 0.128 m.; Width of handle, 0.033 m. Grayish buff clay and slip.

No. 88. Ht. 0.066 m.; with handle, 0.138 m.; D. lengthwise, 0.135 m.; D. crosswise, 0.123 m.; Width of handle, 0.035 m. Pinkish gray clay and slip.

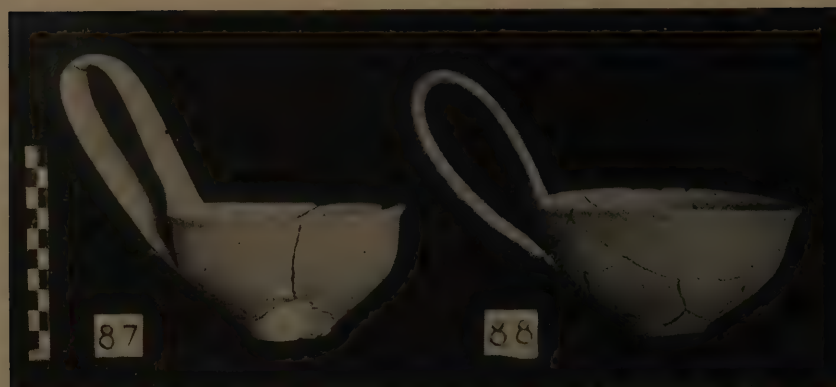


FIGURE 144. TWO CUPS OR SCOOPS WITH HIGH HANDLES, FROM THE POTTER'S SHOP

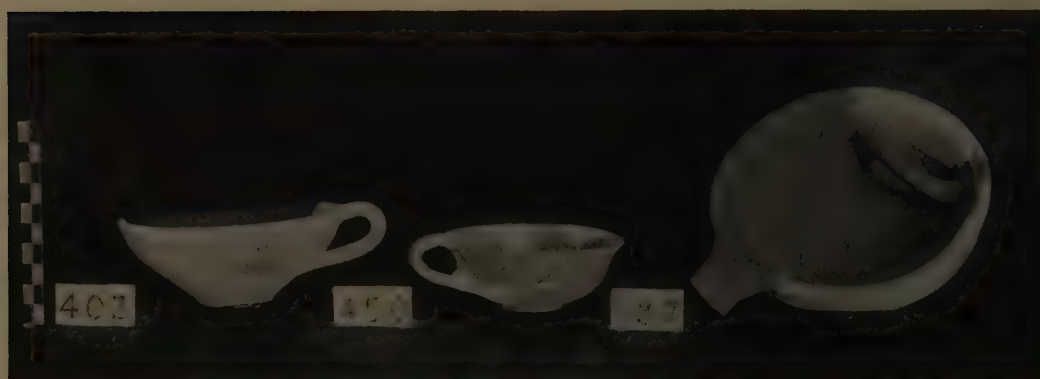


FIGURE 145. TWO SMALL CUPS AND A SCOOP, FROM THE POTTER'S SHOP

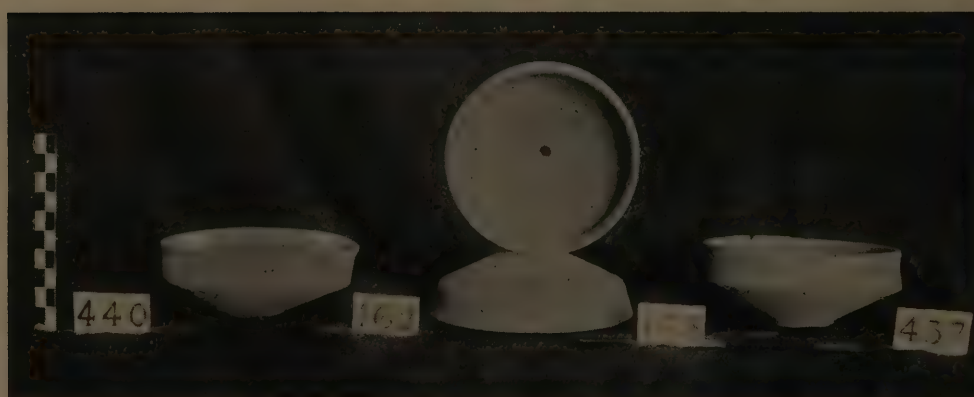


FIGURE 146. FOUR SMALL SAUCERS OR LIDS, FROM THE POTTER'S SHOP

They are all nicely turned vessels of good fabric (Fig. 146),¹ which differ not a little in size and proportions, but are all alike in having a hole pierced directly through the bottom. They have a small, flat base (the bottom of which is always marked by string lines; cf. Dawkins, *J. H. S.*, XXIII, 1903, p. 249, Fig. 2), spreading sides, with an angle at the shoulder, from which they rise almost vertically to the rim. The rim is often plain, often has a slight outward roll. There are no handles. In height these dishes range from 0.034 m. to 0.05 m.; in diameter, from 0.094 m. to 0.115 m. The surface is not smoothly finished.

The purpose of these little utensils is not perfectly clear; they would serve very acceptably as lids for jars of the type to be described in the next section; and the hole would permit the escape of steam when the jar was used to boil liquids.

5. From Room 13 came about twenty attractive little jars of good fabric, almost all made of greenish gray clay with thin walls (Fig. 147).² They stand on a small flat base, have a well-shaped body, and a comparatively large mouth with upright rim. Instead of handles there are three symmetrically spaced vertical lugs, each pierced by a horizontal hole. The smallest jar is 0.094 m. high and has a diameter of 0.11 m.; the largest measures 0.109 m. in height and 0.116 m. in diameter. The mouth varies slightly in size, ranging from 0.077 m. to 0.085 m. in diameter, and would comfortably take a lid of the shape described in the preceding section.

6. No. 386, Fig. 148.³ Height, 0.11 m.; diameter, 0.23 m.; diameter of bottom, 0.129 m. A low, bell-shaped jar with flat bottom, broad flanged rim, and two horizontal loop handles was the only example of its kind recovered. It is of a particularly good fabric with smoothly slipped surface, and the shape itself is attractive. The type is known from other Mycenaean sites.

7. In Room 33 were recovered eight large jugs (Fig. 149).⁴ They stand on a small raised base, have a tall symmetrical body, high neck, and a splaying rounded rim. One large round handle swings down from the rim to the widest part of the body (or just above it). The fabric is much coarser than that of the preceding vases: the clay is by no means so well sifted and the surface of the pot is not so smoothly finished. But these are of course ordinary household utensils made for service, and fine fabric was not required. The eight examples are not identical in size, though the differences are not great: the smallest is 0.237 m. high and has a greatest diameter of 0.20 m.; the corresponding dimensions of the largest specimen are 0.268 m. and 0.225 m.; but the former has a slightly wider mouth (0.109 m. as against 0.102 m. in diameter).

8. Forty large basins were found, chiefly in the same room (33) in which the jugs were stored. They are of two different types.

¹ No. 173. Ht. 0.036 m.; D. 0.109 m.; D. of base, 0.033 m. Fine pinkish buff clay and slip.

No. 162. Ht. 0.042 m.; D. 0.10 m.; D. of base, 0.03 m. Fine pink clay and slip.

² No. 130. Ht. 0.105 m.; greatest diameter, 0.117 m.; D. of mouth, 0.082 m.; D. of base, 0.044 m. Fine light buff clay and slip.

No. 223. Ht. 0.098 m.; greatest diameter, 0.109 m.; D. of mouth, 0.085 m.; D. of base, 0.048 m. Fine greenish gray clay and slip.

³ No. 386. Fine buff clay and slip.

⁴ No. 485. Ht. 0.27 m.; D. 0.217 m.; D. of mouth, 0.101 m.; D. of base, 0.079 m. Coarse buff clay, pink at core.

No. 488. Ht. 0.25 m.; D. 0.201 m.; D. of mouth, 0.105 m.; D. of base, 0.074 m. Coarse grayish buff clay; greenish yellow surface.



FIGURE 147. THREE SMALL JARS, FROM THE POTTER'S SHOP

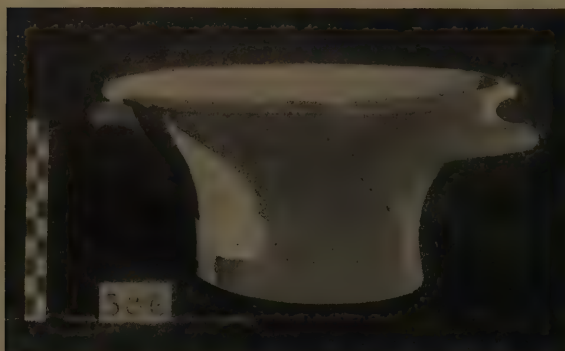


FIGURE 148. BELL-SHAPED JAR, FROM THE POTTER'S SHOP



FIGURE 149. TWO LARGE JUGS, FROM THE POTTER'S SHOP

a. Shallow vessels (Nos. 123 and 522, Fig. 150)¹ with low, neatly formed raised base, curving spreading sides, flanged flat rim, and two horizontal handles which are made of a flat strip of clay pinched out into a triangular shape. The fabric is not especially good and two of the basins have been badly distorted in shape, perhaps during the firing. Only four examples were found. The smallest is 0.10 m. high and has a diameter of 0.278 m.; the largest measures 0.125 m. and 0.31 m. in height and diameter respectively.

b. Larger basins, generally of much better quality than those of the first group, with smoothly slipped surface (Fig. 151).² They seem to have been much more carefully made and are usually very regular in shape, rising from a low raised base (in some cases shaped with clean sharp lines), with broadly curved sides which bend inward to the rim. The rim is sometimes rounded off on top, occasionally flattened with a small flange on the outside. There are four comparatively slender round loop handles set horizontally and in most cases fairly symmetrically spaced. The basins show a considerable range in size: the smallest is 0.123 m. high, 0.405 m. in diameter, and stands on a base 0.148 m. wide; the corresponding dimensions of the largest are 0.148 m., 0.45 m., and 0.164 m. In one instance the base has a diameter of only 0.101 m.

g. The shape of which examples came to light in greatest abundance in the shop is a deep bowl, almost a jar, of rather coarse fabric, but extremely regularly and well formed. No fewer than 661 specimens were found, the vast majority in Room 13, but more than one hundred in Room 33. They had been very badly shattered (the fabric seems to be a brittle one) by the débris fallen from above, and of this great number, established by a count of the bases, only thirteen were recovered intact (Fig. 152).³

These pots were almost all made of a porous, brick-red clay, well fired, with fairly thin shapely walls, curving from a small raised base to a flat, flanged rim, which slopes obliquely downward toward the interior of the vessel. There are two vertical flat loop handles. The surface bears only the thinnest kind of slip, if any, and is not polished, but the deep color, which often presents mottled variations, is not unattractive. Regular wheel marks appear in almost all cases.

These pots were almost certainly intended to be employed as cooking vessels. They vary somewhat in size, profile, and proportions of base and mouth, but the dimensions do not differ greatly; the measurements of a few examples are worth recording:

Height	0.174 m.	0.170 m.	0.165 m.	0.153 m.
Diameter of body	0.207 m.	0.203 m.	0.196 m.	0.186 m.
Diameter of mouth	0.175 m.	0.184 m.	0.164 m.	0.178 m.
Diameter of base	0.082 m.	0.069 m.	0.076 m.	0.068 m.

¹ No. 522. Ht. 0.094 m. to 0.103 m.; D. 0.279 m.; D. of base, 0.099 m. Fine pink clay, buff at surface, buff slip.

No. 123. Ht. 0.109 m. to 0.12 m.; D. 0.307 m. to 0.337 m.; D. of base, 0.102 m. Rather coarse greenish yellow clay, baked pink on one side.

² No. 518. Fairly fine clay, light brick-red in color; buff slip which has turned pink here and there.

No. 509. Fine buff clay, pink at core; smooth buff slip.

No. 496. Fine clay, gray at core, pink toward surface; smooth buff slip.

³ No. 102. Ht. 0.175 m.; greatest diameter, 0.202 m.; D. of mouth, 0.186 m.; D. of base, 0.081 m. Light brick-red clay not too well sifted, rather porous; thin grayish buff slip.

No. 126. Light porous terracotta-colored clay; grayish buff slip.

No. 127. Brick-red clay, grayish buff slip.

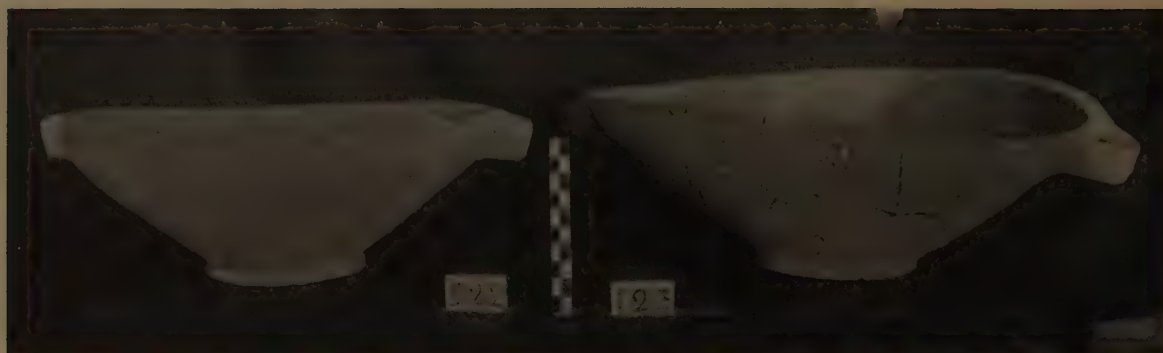


FIGURE 150. TWO BASINS OF THE TYPE WITH TWO HANDLES, FROM THE POTTER'S SHOP



FIGURE 151. THREE LARGE BASINS OF THE TYPE WITH FOUR HANDLES, FROM THE POTTER'S SHOP

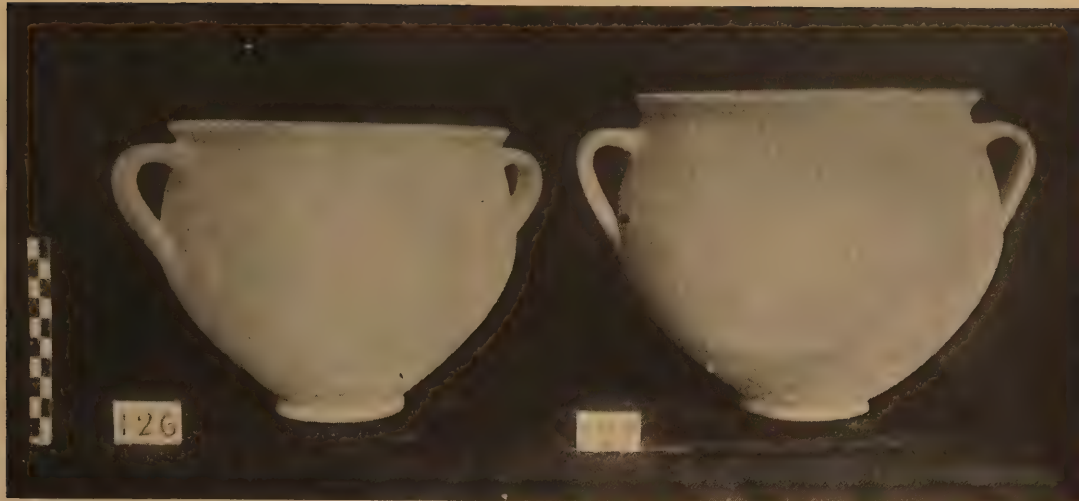


FIGURE 152. TWO COOKING POTS, FROM THE POTTER'S SHOP

10. No. 225, Fig. 153. Height, 0.187 m.; greatest diameter, 0.171 m.; diameter of mouth, 0.113 m.; of base, 0.068 m. A small jug or jar, similar in fabric to the preceding, but blackened by fire and with a patch of bright red mottling on one side. It was not a common shape, as only one other example could be recognized among the fragments. The jug has a high body, a rim much like that of the cooking pots, and a single vertical round loop handle attached to the neck below the rim.

11. Four curious vessels of a squat conical shape, with a flat loop handle at the apex of the cone, were found in the same room (13) with the cooking pots. In fabric they are identical with the latter, for which they were perhaps intended to serve as lids; their diameter (*ca.* 0.17 m. to 0.191 m.) would allow them to fit very comfortably. The handle was very carelessly placed without regard to the exact centre of the lid. There is no hole for the escape of steam. Two specimens (Nos. 585 and 586) are shown in figure 154.¹

12. Ten scoops of coarse fabric came from the same room (13). They are fairly shallow cups or bowls which stand on a carelessly made low raised base, and have at one side a heavy projecting leg-handle, and at the opposite side a slight groove or hollow in the rim to serve as a channel for pouring.

The scoops are of two sizes which differ somewhat in details. In the larger (Fig. 155, No. 413)² the channel is broad; in the smaller



FIGURE 153. SMALL JAR, FROM THE POTTER'S SHOP

¹ No. 585 (part of one side restored). Ht., 0.09 m.; D. 0.191 m. Clay same as that of cooking pots; slip mostly worn off.

No. 586. (much restored). Ht. 0.08 m.; D. *ca.* 0.17 m. Brick-red porous clay; light slip.

² No. 413. Ht. 0.068 m.; D. 0.146 m.; length of handle, 0.124 m. Coarse, brick-red clay, buff slip.

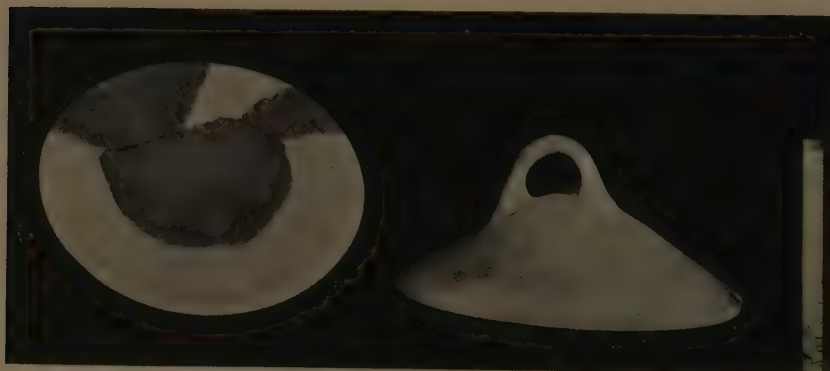


FIGURE 154. TWO LIDS, NOS. 586, 585, FROM THE POTTER'S SHOP

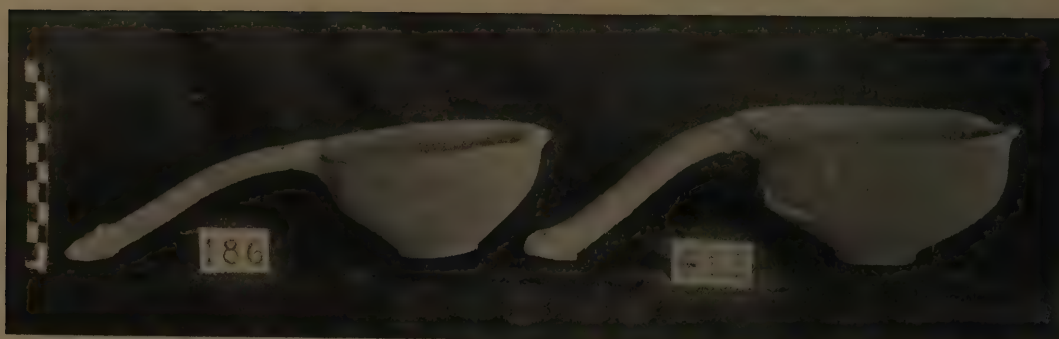


FIGURE 155. TWO SCOOPS OR LADLES, FROM THE POTTER'S SHOP

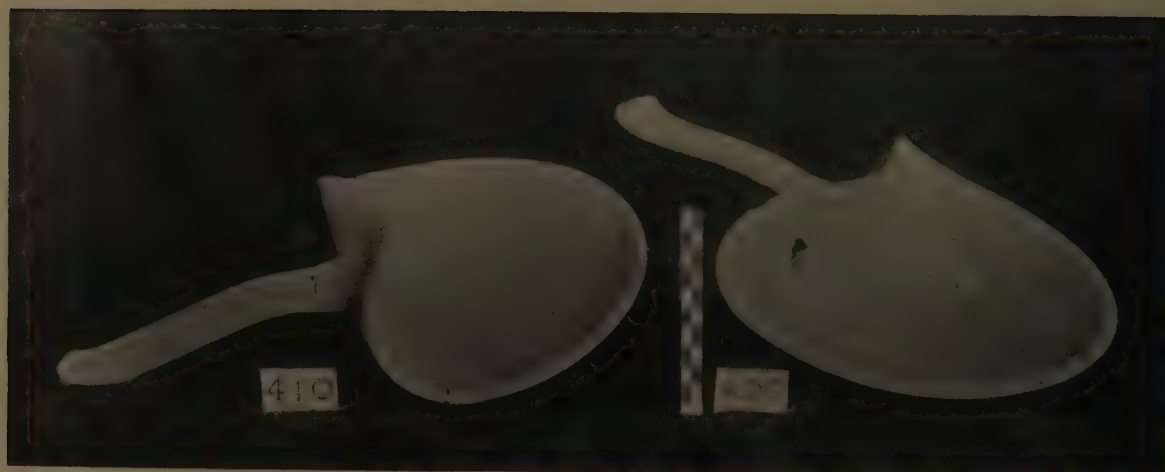


FIGURE 156. TWO BRAZIERS, FROM THE POTTER'S SHOP

(Fig. 155, No. 186)¹ it is a mere groove. The thick handle, projecting from the rim, is bent downward so that its end reaches approximately the same level as that of the base of the vessel, and thus acts as a sturdy support, which enables the scoop when set down to stand without leaning. In the case of the smaller size there is a large vertical hole through the end of the handle, by which the scoop could be suspended from a nail or a peg. The larger size has four or five smaller holes at intervals along the handle — perhaps to facilitate baking, since the biscuit here is very thick. In the smaller type the rim is finished with a slight outward roll; in the larger it is rather flat and set obliquely, resembling the rim of the cooking pots.

The dimensions of the largest example are: height, 0.07 m.; diameter, 0.148 m.; length of handle, 0.12 m.; and the other specimens of the same type do not show any material variations. The measurements of the smaller type (smallest example, No. 186) are: height, 0.058 m.; diameter, 0.116 m.; length of handle, 0.13 m.

A similar vessel, but with angular profile of side, is shown in Figure 145, No. 187.² This is peculiar in that it has, on the interior opposite the handle, a heavy round crossbar, forming a rather flat loop, which may have been used for suspending the vessel by a string, but looks startlingly like the device in "moustache cups" of mid-nineteenth century crockery. Height, 0.068 m.; diameter, 0.139 m.; the projecting leg-handle is missing.

13. In the same storeroom (13) were found five braziers of similar coarse fabric, representative examples of which are illustrated in Figure 156.³ In shape they resemble shallow basins, one side of which has been bent violently inward and upward, and at the same time provided with a heavy handle, which projects like a leg straight outward and downward behind. The purpose of the downward slope was here again to give support so that the vessel might stand on its small flat base; but the execution was in all instances faulty, as a result of which the end of the handle and the base do not exactly agree in level. There are regularly two or three small holes along the handle and a large one — for suspension — near its end. The high turned-back side of the brazier at the base of the handle has a very practical purpose, as it protected the hand of the person holding the vessel from the heat of the burning charcoal within.

The braziers vary slightly in size, ranging in diameter from 0.22 m. to 0.243 m., and in height from 0.09 m. to 0.10 m. (at back).

14. The total number of craters found in the Shop reached 51; five of these stood bottom upward in the southwest corner of Room 12; the rest were arranged in two rows, stacked in a double tier, along the south wall of Room 33.

In shape these craters (Fig. 157)⁴ are, though many times as large, very closely similar to the cooking pots described above. The chief differences are in the rim, which, in keeping with the dimensions of the pot, is thick and heavy, flat on top, with a broad flange on the outside, and in the handles, of which there are four — stout round loops, set horizontally,

¹ No. 186. Coarse, brick-red clay, grayish buff slip.

² No. 187. Coarse, brick-red clay, containing foreign particles; no slip now.

³ No. 407. Ht. at back, 0.092 m.; at front, 0.074 m.; D. (side to side), 0.243 m.; length of handle, 0.168 m. Porous brick-red clay, buff slip.

No. 410. Ht. at back, 0.095 m.; at front, 0.073 m.; D. (side to side), 0.233 m.; length of handle, 0.172 m. Coarse brick-red clay, thin grayish slip.

⁴ No. 530. Coarse yellowish buff clay.

and fairly regularly spaced, high up on the body of the vessel, not far below the rim. The handles are invariably pierced, each with two small holes, perhaps, as suggested above in other cases where the biscuit was very thick, to facilitate thorough baking. The craters are made of coarse, unsifted clay, as might be expected in vessels of such size, and the



FIGURE 157. HUGE CRATER, FROM THE POTTER'S SHOP

surface is rather rough; but they have been shaped with great regularity and are strong and practical, by no means unworthy products of the potter's handicraft.

There is a considerable range in size and proportions: the smallest crater is 0.34 m. high, has a diameter of 0.435 m., and its base measures 0.195 m. across. The largest is 0.45 m. high, 0.481 m. in diameter at its widest point, and stands on a base 0.202 m. wide. Another example showing different proportions has as corresponding dimensions 0.385 m., 0.40 m., and 0.165 m.

15. In Room 13 were found two large jugs of the amphora shape, one of which has been reconstructed as shown in Figure 158 (No. 375).¹ Height 0.375 m.; greatest diameter, 0.328 m.; diameter of base, 0.104 m. The body has a shape very closely resembling that of the smaller stirrup vases. The place of the stirrup handle is taken by a high cylindrical neck, from the rim of which two powerful round handles curve down to the shoulder of the vessel. The mouth is roughly elliptical in form, though whether this was intentional or merely



FIGURE 158. LARGE AMPHORA, FROM THE POTTER'S SHOP

accidental is not clear; it has a long diameter of 0.118 m. and a short axis of 0.108 m. The fabric is good, though the walls are thick and made of coarse clay. The heavy handles are perforated at the top by a single vertical hole, at the bottom by a horizontal hole, both small. In shape the pot reminds one of the large water jugs found on classical sites.

16. No. 583, Fig. 159.² Height 0.463 m.; diameter at top, 0.563 m.; diameter of base, 0.348 m. A deep cylindrical jar of most unusual shape, with flat base, almost vertical sides, expanding toward the top and curving out to a massive flat rim, flanged outside. The jar had two sturdy round loop handles set horizontally opposite each other just below the rim. The rim has a breadth of 0.036 m. on top. There is no painted decoration, but around the

¹ No. 375. Fairly fine light buff clay.

² No. 583. Coarse, but good, pinkish buff clay.

body are four slightly raised broad bands, one just above the base, one below the rim, and two almost symmetrically placed in the intervening space. These latter are wider than the others, having a breadth of *ca.* 0.06 m.; perhaps these bands mark the junctions of the sections in which the vase was no doubt thrown on the wheel.



FIGURE 159. HUGE CYLINDRICAL JAR, No. 583, FROM THE POTTER'S SHOP¹

No exact parallel to this capacious shape is known to me. The jar was found in Room 33 at the east end of the northernmost row of large craters.

17. No. 310, Fig. 160.¹ Height 0.045 m.; diameter, 0.28 m.; depth inside, 0.025 m. A curious circular pan was found in the upper part of the mass of the débris filling Room 34 (which was probably a stairway), and since it presumably, therefore, came from the floor above it may not, strictly speaking, belong to the stock of the Potter's Shop. But as it looks unused, like the other pots, and certainly came from the same building, it may be included here.

¹ No. 310. Coarse clay, gray at core, pinkish buff at surface.

It is a heavy, clumsy utensil with walls 0.015 m. thick. It has a flat bottom, almost vertical sides which end in a roughly flattened rim, and two crudely made horizontal loop handles. It seems to be some kind of baking pan, but the shape is not a common one, so far as I know.

The huge stock of vases found in the Potter's Shop, representative specimens of which have now been described, must be regarded chronologically as a closed group. These pots, as stated above, had never seen actual service: they had certainly been manufactured at some place not very far distant — perhaps within the building itself — and had been stored



FIGURE 160. BAKING PAN, NO. 310, FROM THE POTTER'S SHOP

away for use as required or, more probably, for sale. The twenty shapes represented must, therefore, be forms for which there was a demand at a certain definite time in the Third Late Helladic Period. Many of these shapes are already familiar from other sites. The painted vases all belong to types known before, though the recovery of so great a number of decorated cylixes is a distinct accession to the preserved body of Mycenaean pottery. But among the undecorated examples are several shapes not hitherto available in published illustrations. Such are the shallow dishes with pierced bottoms, the small jars with lugs, the large basins with four handles, the cooking pots, the cylindrical jar, and the baking pan — perhaps also the conical lids, the scoops, and the large craters with four handles. The stock as recovered seems therefore to have added eight or nine new shapes to the Mycenaean repertory. But it is from the shapes already exemplified elsewhere that we must seek evidence for a more definite determination of the date within the Third Late Helladic Period to which the deposit must be assigned.

In this connection the admirable stratigraphic observations of Mr. Wace at Mycenae are of the greatest importance; indeed they offer almost the only detailed evidence available for a subdivision of the long period of Late Helladic III based on a painstaking examination of an undisturbed and stratified deposit. In the section immediately adjoining the

Lion Gate it was observed that cylixes, both painted and unpainted, were common in the deeper layers and were also of very good fabric, whereas in the upper layers, in association with pottery of the "Granary Class," cylixes had become noticeably rare, and the few that were found were of poor style and carelessly made (*B. S. A.*, XXV, pp. 20 ff., especially p. 34). Mr. Wace was thus able to say "the kylix so common a feature of early L. H. III deposits, practically disappears by the time the Granary Class begins." The abundance of cylixes in the Potter's Shop at Zygouries must accordingly be regarded as a significant phenomenon, clearly fixing the date of the deposit in the early part of Late Helladic III. All these cylixes are particularly well made, and in their patterns, though debased, we have unmistakable reminiscences of some characteristic motives of the Palace Style, as has been pointed out above. That this tradition could have continued so vigorously to maintain itself much beyond the middle of Late Helladic III is certainly, in view of what we now know of the pottery belonging to the later part of the period, as represented by the Granary Class, extremely unlikely.

Not only the cylixes, however, but the whole stock of vases from the Shop are of very excellent fabric, and there can be no doubt that their connections are with the earlier half of Late Helladic III, when the technique of making pottery was still at a high point, rather than with the later stage, when the much more debased products of the Granary Class were characteristic. Such vases as the three-handled amphora, the low bell-shaped jar, the cooking stand, the capacious four-handled basins, with their smooth lustrous surface, and the well-shaped cooking pots are manifestly still the exponents of true Mycenaean ceramic tradition.

Their chronological place can, however, be determined even more closely. In trenches dug beneath the floors of the Shop and below the northward continuation of the terrace on which the building stands were found sherds decorated with patterns in excellent glaze in the best style of Late Helladic III and clearly attributable to the very beginning of that period. These are the sherds very closely resembling the best Third Late Helladic ware found in the *dromos* of Tomb 505 and elsewhere at Mycenae,¹ some examples of which were shown above in Figure 130. They must certainly belong to a period antedating the construction of the shop, since, when the latter was built, this material had already become stratified. But the solidly constructed walls, in which stones of great size were used, indicate that we are not dealing with a late type of building, such as that exemplified in the houses at Korakou; the shop also undoubtedly belongs to an early phase of Late Helladic III. This does not necessarily establish likewise the date of the store of pottery, since a building so substantially made might well stand for many generations. But the painted plaster on the walls at the time the shop was destroyed by fire could hardly have endured so long, and may properly be considered as more or less nearly contemporary with the store of vases. The remains are unfortunately sadly scanty, but the character of the patterns, especially the spirals (PLATE III), is not at all consistent with the final stage of Late Helladic III; it points rather to the earlier half of the period.

In view of all these considerations, then, it seems safe to say that the contents of the

¹ I cite these parallels with the kind permission of Mr. Wace, whose forthcoming publication of the Tombs will appear in *Archaeologia*.

Potter's Shop must be assigned to an intermediate phase, distinctly nearer the beginning than the end of the Third Late Helladic Period — perhaps not far from the close of the fourteenth century, B.C.

THE CHAMBER TOMBS

TOMB XXXIII

Tomb XXXIII yielded twelve vases of five different shapes; nine have painted decoration and three are undecorated.

Painted Ware

1. There were three small stirrup vases, all of good fabric and decorated with fine horizontal lines between broad bands in the familiar Third Late Helladic style.

No. 357 (Fig. 161) ¹ is the smallest (height, 0.08 m.; greatest diameter, 0.087 m.; diameter of base, 0.05 m.); it stands on a broad ring base, has a somewhat spherical body and relatively high handle and spout. Apart from the horizontal bands, the decoration offers only three concentric circles on the disk of the handle. The glaze is of good quality, reddish brown in color.

No. 362 is slightly larger (Fig. 162; height, 0.099 m.; greatest diameter, 0.11 m.; diameter of base, 0.055 m.) ²; the body rises from a broad ring-base, spreads widely to the point of greatest diameter, which is relatively high, then curves sharply inward toward the handle, as a result of which the upper part of the pot has a nearly flat surface. This area is ornamented with a characteristic late Mycenaean pattern, including double hooks, double curving rows of dashes, and diamonds as space fillers; while below are the usual horizontal bands, broad and fine. On the disk of the handle are four concentric circles. The glaze is black in color and badly worn; where thin, as in the finer lines, it appears as a lustrous brown.

No. 356 (Fig. 161; height, 0.085 m.; greatest diameter, 0.121 m.; diameter of base, 0.06 m.) ³ has a very low, compressed shape, with comparatively slender spout and handle. The decoration is carried out in excellent red glaze, which has turned black on one side in the firing. The surely drawn broad bands enclosing fine lines do not seem far removed from the style represented at Tell el Amarna. The upper ring is ornamented with five small circles in broad outline, in four cases paralleled by a ring of dots within and without. The fifth circle has an exterior ring of dots, but encloses a single central dot. On the disk of the handle are four concentric circles surrounding a large dot.

2. No. 350, PLATE XIX. ⁴ Height, 0.27 m.; diameter, 0.21 m.; diameter of base, 0.087 m. The best pot from Tomb XXXIII is a tall jug standing on a flat base with slightly raised profile; it has a broad, well-formed oval body, curving inward to a slender neck, which rises straight upward about one half the height (0.09 m.) of the body itself (0.18 m.). The neck widens at the top to form a thin flat rim; below the latter is attached a flat ridged handle, which swings in a good curve down to the upper part of the body of the vase. Around the

¹ No. 357. Fine yellowish buff clay, smooth slip of the same color. Good red glaze shading to brown.

² No. 362. Fine yellowish buff clay, smooth slip of the same color.

³ No. 356. Fine pink clay, yellowish buff slip.

⁴ No. 350. Fine yellowish buff clay and slip.

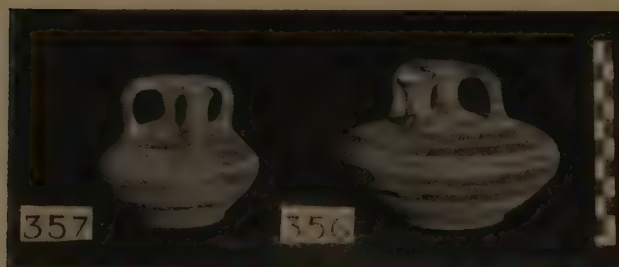


FIGURE 161. TWO STIRRUP VASES, FROM TOMB XXXIII

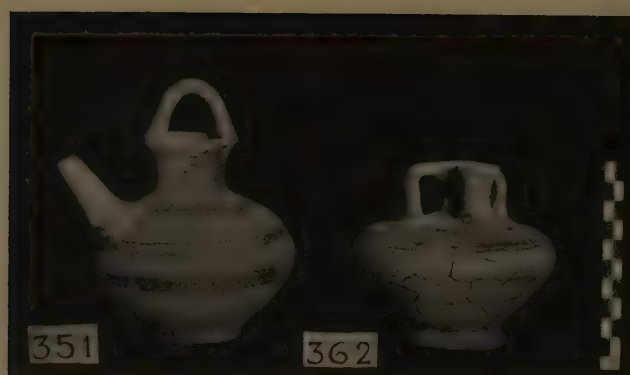


FIGURE 162. SPOUTED JUG AND STIRRUP VASE, FROM TOMB XXXIII

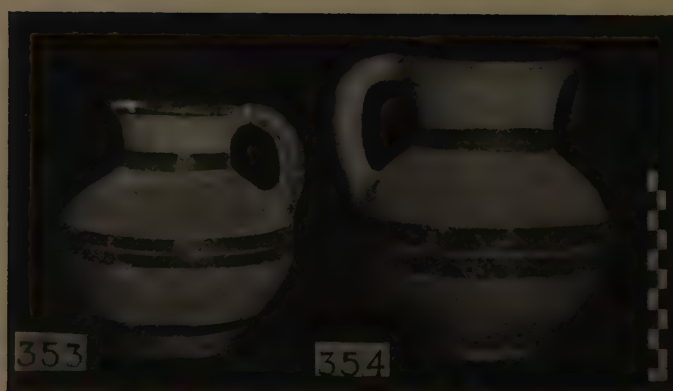


FIGURE 163. TWO JUGS, FROM TOMB XXXIII

base of the neck is a raised ring; this, the ridged handle, and the flat rim are certainly reminiscences of technique in metal. The pot is divided into the usual zones by broad bands of good black glaze applied with great regularity. In the upper zone is a simple linear decoration formed by three parallel wavy lines, with spirals effectively used to fill the open spaces. Where the paint is thin, the color lightens to brown, as in the two tails beneath the handle; and at one point is a bright red mottled patch.

3. There were four jugs of different sizes, but all of approximately the same broad shape, with a wide mouth and a single handle. They are all of good regular fabric, but the decoration consists of nothing more than broad horizontal bands.

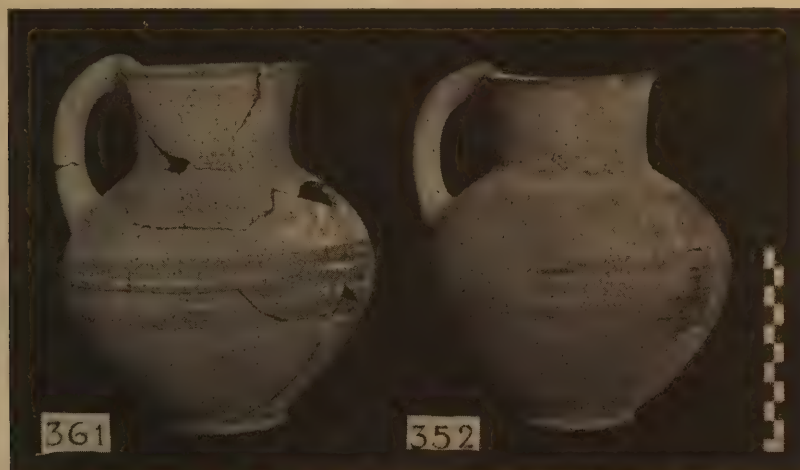


FIGURE 164. TWO JUGS, FROM TOMB XXXIII

No. 353, Fig. 163. Height, 0.135 m.; diameter, 0.127 m.¹

No. 354, Fig. 163. Height, 0.158 m.; diameter, 0.137 m.²

No. 352, Fig. 164. Height, 0.191 m.; diameter, 0.166 m.³

No. 361, Fig. 164. Height, 0.199 m.; diameter, 0.170 m.⁴

4. No. 351 (Fig. 162; height, 0.11 m.; diameter, 0.11 m.),⁵ a small jug, with spherical body, narrow neck, basket handle, and a tubular spout projecting from one side, is of a well-known shape and requires no further description here. The neck is painted in solid color, the body decorated merely with belts of broad and fine lines. A similar vessel, but of inferior fabric, was found at Korakou (*Korakou*, p. 67, Fig. 97, No. 1).

Unpainted Ware

1. Two jugs, each with a single handle, are quite similar in shape to the painted examples. They are of good enough fabric, being very regularly formed, but bear no decoration whatsoever.

¹ No. 353. Fine pinkish buff clay, buff slip; excellent reddish brown glaze.

² No. 354. Fine pinkish buff clay, buff slip; red paint deepening through brown to black.

³ No. 352. Fine pinkish buff clay, yellowish slip; black glaze thinning to brown.

⁴ No. 361. Fine grayish buff clay, greenish buff slip; thin brown glaze (remnants of original black?).

⁵ No. 351. Fine light buff clay and slip; black glaze badly worn.

No. 348, Fig. 165. Height, 0.215 m.; diameter, 0.184 m.; diameter of mouth, 0.105 m.¹

No. 355, Fig. 165. Height, 0.220 m.; diameter, 0.189 m.; diameter of mouth, 0.107 m.

This specimen has a badly damaged surface.²

2. No. 349, Fig. 166. Height, 0.158 m.; diameter, 0.142 m.; diameter of mouth, 0.086 m.³

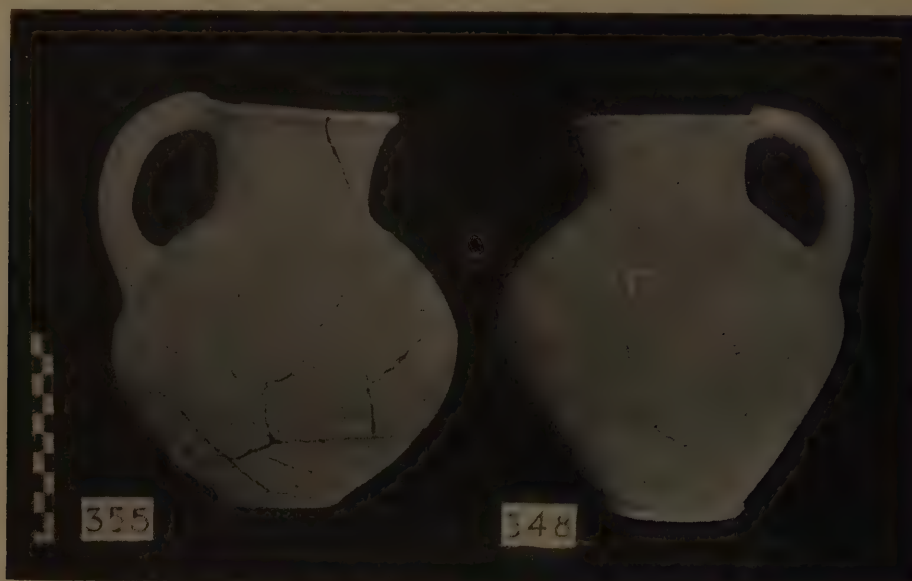


FIGURE 165. TWO LARGE JUGS, FROM TOMB XXXIII

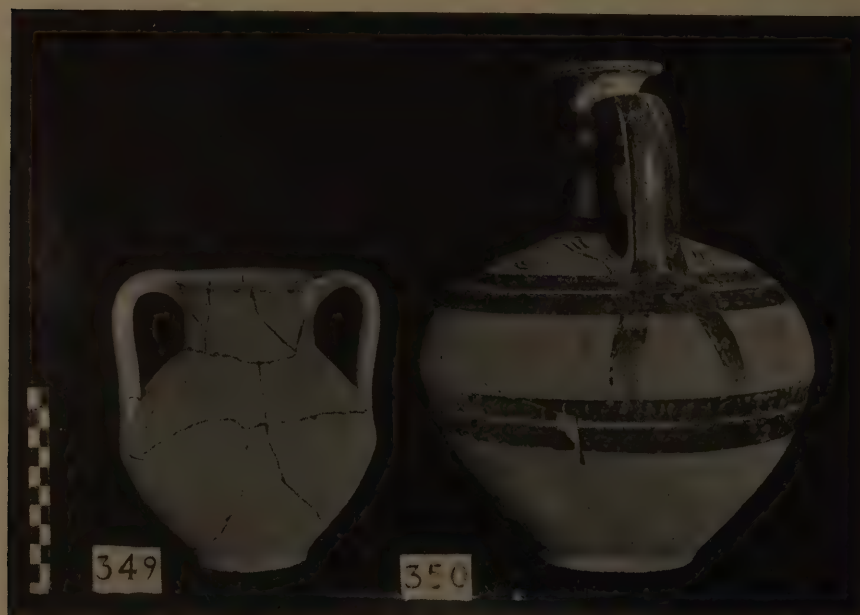


FIGURE 166. TWO JUGS, FROM TOMB XXXIII

¹ No. 348. Pinkish buff clay, well refined, smooth buff slip.

² No. 355. Yellowish buff clay, not so well refined; slip of same color. Lower half of one side baked pink and most of surface here has flaked off.

³ No. 349. Greenish buff clay, well cleaned, porous texture, slip not smooth.

This is a jug of somewhat more delicate fabric, with two vertical flat handles running from the top of the neck to the widest part of the body; in shape it is otherwise similar to the two preceding examples.

TOMB XXXV

In Tomb XXXV were found ten vases representing eight different shapes; eight bear painted decoration and the other two are plain.

Painted Ware

1. Two small stirrup vases may be mentioned first. One (No. 331, Fig. 167; height, 0.091 m.; diameter, 0.125 m.; diameter of base, 0.055 m.)¹ is of a squat shape similar to that of No. 356 from Tomb XXXIII. It is decorated with the customary belts of lines, broad and fine, about the body, and has a simple pattern of overlapping chevrons diminishing to mere dashes in the upper circle. Five concentric rings about a central dot mark the top of the disk of the handle. The glaze is brownish black in color and not well preserved.

No. 406, Fig. 167. Height, 0.102 m.; diameter, 0.124 m.; diameter of base, 0.055 m.² This pot had been badly crushed and has been reconstituted from a great many fragments. In shape it is not so squat as No. 331, but it bears a decoration of similar type, though the pattern in the upper circle is not the same. This pattern consists of a dotted calyx and the upper end of a curve-headed stamen, being a stylized form of the flowers that appear on the vases from Tell el Amarna (*Catalogue of Vases in the British Museum*, Vol. 1, Part 1, p. xli). On the upper surface of the disk of the handle is a single large dot. The glaze, which is in very bad condition, is of a faded reddish brown color.

2. No. 329, Fig. 168. Height, 0.077 m.; diameter, 0.072 m.; diameter of mouth, 0.051 m.³ This is a tiny "amphora" of a favorite Mycenaean shape, with three small horizontal loop handles. The lower part of it is decorated with broad and narrow bands; in the upper zone, in what might be called panels between the handles, are two horizontal rows of dotted circles, with a few extra dots thrown in for good measure here and there in the background. The glaze is brownish black in color, rather worn and not very lustrous.

3. No. 332, Fig. 168. Height, 0.047 m.; diameter, 0.062 m.; diameter of mouth, 0.034 m.⁴ A diminutive cylindrical jar with flat base, angular shoulder, and a low neck terminating in a flaring rim. There are two small horizontal loop handles, not symmetrically spaced. The lower part of the pot is encircled by two broad bands; in the upper zone on each side between the handles appears a group of short parallel vertical dashes. The glaze, a brownish black in color, is of inferior quality.

4. No. 330, Fig. 168. Height, 0.052 m.; with handle, 0.081 m.; diameter, 0.085 m.⁵ A small deep cup with rounded bottom, roughly circular mouth, and a curving basket handle made of a flat strip of clay. The body is decorated with five irregular groups of vertical lines, carelessly drawn in poor, thin reddish paint. One group consists of four, two others of five, and two of six lines. Along the top of the handle runs a single wavy band, bordered on each side by a straight line following the edge.

¹ No. 331. Fine buff clay and slip.

² No. 406. Fine buff clay and slip.

³ No. 329. Fine buff clay and slip.

⁴ No. 332. Clay and slip as in No. 329.

⁵ No. 330. Fine pink clay, smooth buff slip.

5. No. 328, Fig. 169. Height with handle, 0.08 m.; length, 0.142 m., width, 0.061 m.¹ A small askos of a shape familiar in Mycenaean pottery (*Ἀρχ. Δελτ.*, III, 1917, p. 97, Fig. 70; p. 153, Fig. 114, No. 4; *Prehistoric Thessaly*, p. 207; *Fahrbuch d. Inst.* 22, 1907, p. 213, Figs. 3 a, b, c, and 4; *Korakou*, p. 53, Fig. 73, 2). Long and narrow with slightly flattened

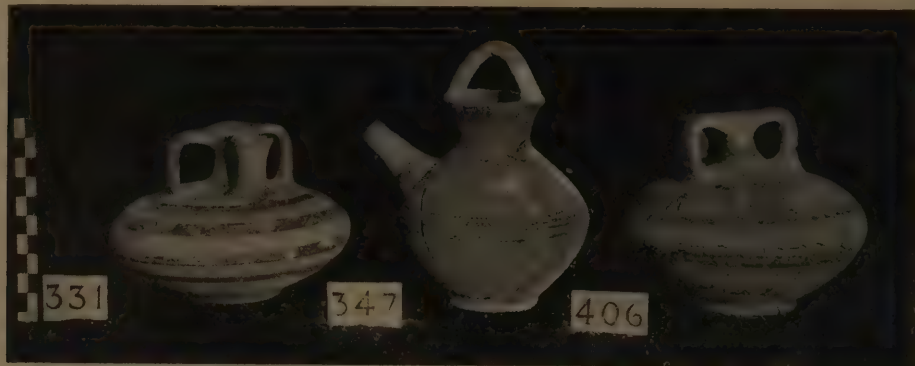


FIGURE 167. THREE SMALL POTS, FROM TOMB XXXV

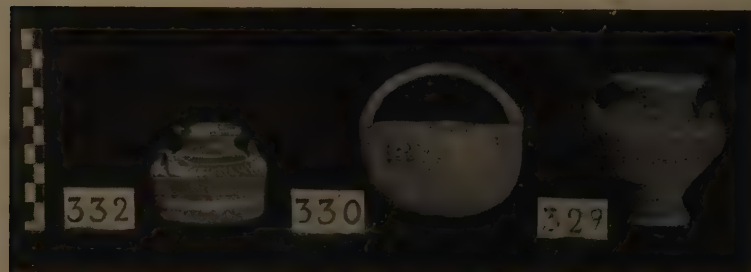


FIGURE 168. THREE DIMINUTIVE POTS, FROM TOMB XXXV

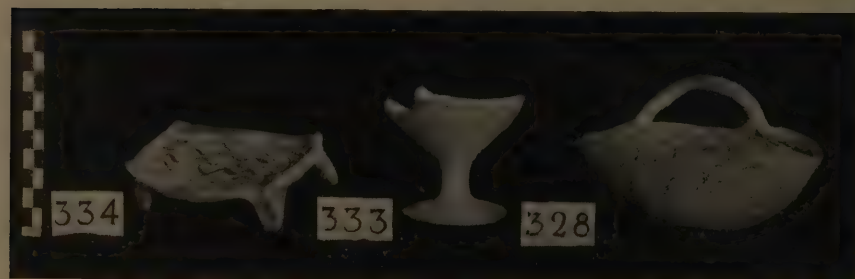


FIGURE 169. "TABLE," STEM OF GOBLET, AND ASKOS, FROM TOMB XXXV

base, it has a closed top or back, surmounted by a longitudinal basket handle; one end opens in a small mouth or spout, the other terminates almost in a point. The decoration on each side of the vessel consists of a series of curving wavy lines springing from below, which may be a highly conventionalized rendering of a naturalistic grass pattern on early Mycenaean ware. The paint is thin, brownish in color, and is in a poor state of preservation.

¹ No. 328. Fine greenish buff clay, slip almost the same color.

6. No. 347, Fig. 167. Height, 0.107 m.; with handle, 0.135 m.; diameter, 0.097 m.¹ A small jug with a high neck, basket handle, and a tubular spout projecting from the body almost in the line of the axis of the handle. It is closely similar to No. 351 from Tomb XXXIII both in shape and decoration, but is far less well preserved. Much of the surface on one side has flaked away and some bits are missing, as the vessel was badly crushed. The paint is of a good quality, red in color.

7. No. 327, Fig. 170. Height, 0.208 m.; diameter, 0.176 m.; diameter of mouth, 0.11 m.² A large broad jug, similar in shape of body to those from Tomb XXXIII; this example has one vertical flat handle running down from the rim to the upper zone, and two smaller

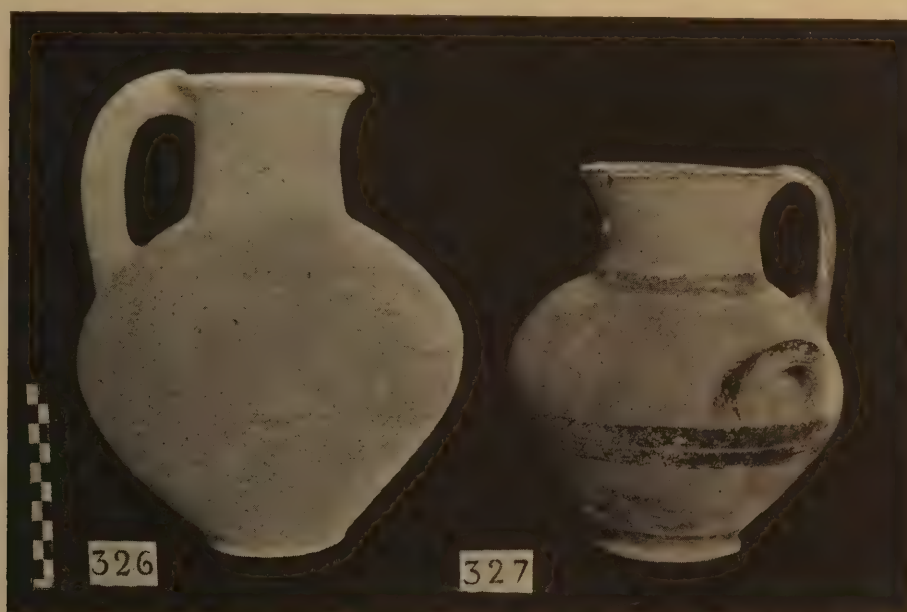


FIGURE 170. TWO JARS FROM TOMB XXXV

round loop handles set low down one on each side. The decoration is limited merely to broad bands in good reddish brown paint.

Unpainted Ware

1. No. 333, Fig. 169.³ The stem and part of the body of a small plain cylix with angular profile, exactly like those of type *c* from the Potter's Shop (Fig. 143). The rest of the vase was not in the tomb nor in the *dromos*, though the greater part of a second similar cylix appeared just outside the door. Apparently both had been deposited here as fragments, one inside the chamber itself, the other in the *dromos*.

2. No. 326, Fig. 170. Height, 0.259 m.; diameter, 0.205 m.; diameter of mouth, 0.106 m.⁴ A large jug with oval body, high neck, rolled rim, and one heavy round handle set vertically. It is almost identical in shape with Nos. 348 and 355 from Tomb XXXIII. In

¹ No. 347. Fine buff clay and slip, the latter somewhat powdery.

² No. 327. Fine buff clay and slip.

³ No. 333. Greenish buff clay and slip.

⁴ No. 326. Rather coarse buff clay, greenish buff slip, once polished.

all three of these examples the upper end of the handle at the point of attachment shows a slight but awkward projection above the level of the rim itself; this is a feature which these jugs share with those from the Potter's Shop.

On the evidence of the pottery, these two Chamber Tombs, XXXIII and XXXV, seem to be approximately contemporary. In support of this statement it is hardly necessary to do more than refer to the illustrations, where the vases may be compared. The small stirrup vases from the two graves are quite similar, and the same is true of the plain jugs and the jugs decorated with broad bands of paint.

Each tomb, also, seems to represent only a single stage within the Third Late Helladic Period. Skeletal remains were in both cases too scanty to be of much use as evidence, save that this fact itself is an indication that many successive interments had not taken place. The bones in Tomb XXXV almost surely did belong to two skeletons, but in the pottery there is no trace of any real chronological distinction; the vases are all essentially synchronous.

Among the types of vessels found, there is certainly a difference between the two tombs, but this may correspond merely to a difference in the character of the persons interred. In Tomb XXXV there was a notable proportion of very small pots; the number of figurines (11) was also unusual, and the objects found included the head of an animal figure and a small table. Perhaps these diminutive offerings indicate the burial of a child. The vessels from Tomb XXXIII, on the other hand, were mainly large, though three figurines and a seal were likewise found here.

The pottery is on the whole very good and is not of the latest Mycenaean style; no vases of the Granary Class were found (cf. *B. S. A.*, XXV, pp. 51 ff.). The painted examples are decorated in glaze of excellent quality (though not well preserved in all cases) and the patterns are executed with precision. The best vase is the tall jug from Tomb XXXIII (No. 350, PLATE XIX; Fig. 166), which in technique is not far from the finest ware produced in Late Helladic III at the beginning of the period. The other pots do not quite measure up to this standard, but are not of markedly inferior fabric. The small stirrup vases are not separated by a great interval of time from the pots of the same shape found at Gurob (*Catalogue of Vases in the British Museum*, Vol. I, Part 1, pp. 182 f.). The date of the whole group may thus reasonably be ascribed to the same good intermediate phase in the earlier half of Late Helladic III to which we have assigned the contents of the Potter's Shop. The plain jugs, as we have seen above, are manifestly a connecting link, and the fragmentary cylixes from Tomb XXXV, which are quite similar to those of type *c* from the Shop, may not be without significance in corroborating this dating.

THE GEOMETRIC PERIOD

The Geometric Period is represented by two pots, both found in Tomb XVIII in the cutting of the Peloponnesian Railway.

No. 308, Fig. 171. Height, 0.237 m.; diameter, 0.176 m.¹ A large jug or oinochoë, with broad body, high narrowing neck, and trefoil lip. The top of the handle is missing. The pot stands on a wide flat base with a slightly moulded edge. It is a simply decorated Geometric

¹ No. 308. Fine yellowish buff clay and slip.



FIGURE 171. JUG, FROM TOMB XVIII, GEOMETRIC PERIOD, No. 308



FIGURE 172. DEEP BOWL, FROM TOMB XVIII, GEOMETRIC PERIOD, No. 309

vase, similar in style to the examples from Corinth published by Miss Nichols (*A. J. A.*, IX, 1905, pp. 411 ff., Pl. XIII B 2). It is completely coated with black glaze except for two narrow belts near the base and high up on the body respectively, which each bear two parallel bands, and a rectangular panel on the front of the neck, where in a frame of parallel lines is a simple pattern of three interlocking zigzags. The handle is marked by short horizontal dashes. The glaze has a good lustrous black color; it is somewhat worn away in spots and is covered here and there by a calcareous accretion very difficult to remove.

No. 309, Fig. 172. Height, 0.177 m.; diameter, 0.248 m.; diameter of mouth, 0.223 m.¹ One handle and part of the adjacent side are missing. A deep bowl or crater of a not unfamiliar Geometric type, entirely coated with glaze except for a narrow horizontal panel high up on each side midway between the handles. In this panel we have a pattern of three parallel zigzag lines almost exactly like that on No. 308. The linear frame of the pattern is also almost identical, as are the horizontal strokes on the flat loop handles. The glaze is of good quality, though worn thin in spots, and is mainly black; but bright red patches, brought out in the firing, appear here and there, giving a mottled effect.

These two pots, with their rather shiny glaze and simple panelled system of decoration, undoubtedly belong to the local northeast Peloponnesian variety of Geometric Ware.

THE ROMAN PERIOD

Three Roman pots, somewhat incomplete, were found at a high level just inside the wall closing the door of Tomb XXXV; and fragments of two more came to light within the chamber, above the thick layer of fallen *stereo* which had once formed the roof of the tomb. All these vases apparently had been deposited in a grave directly above the Mycenaean tomb at a period antedating the collapse of the chamber; and it must have been on the occasion of this collapse that they were carried down to the level at which they were discovered. The three vases are the following:

No. 365, Fig. 173. Height, 0.068 m.; diameter, 0.086 m.² A small jug with broad, flat base, squat body, narrow neck, and a widely splaying lip. The single handle is missing and has been restored in plaster. The pot is of excellent hard fabric with thin walls; the exterior surface, which is coated with thin reddish brown paint, is intentionally roughened and irregular, giving a curious effect. It seems to me (the fragmentary material from within the chamber, which is also somewhat mottled, is more convincing) an attempt to imitate a vase of rather opaque or colored glass.

No. 366, Fig. 173.³ Height, 0.065 m. More than one half of the vessel is missing. This is a small cup of fine fabric, similar to that of the preceding, but with smooth, even surface. It has a broad, flat base, compressed body, and a grooved vertical handle. The walls are of extraordinary thinness, and the exterior is coated with a uniform glazelike slip of creamy-yellow color.

No. 367, Fig. 173. Height, 0.167 m.; diameter, 0.17 m.; diameter of mouth, *ca.* 0.093 m.⁴ Part of one side missing. A broad jug or jar of rather coarse finish, but well made and with very thin walls. It has a flat base, concave underneath, spherical body, large high neck

¹ No. 309. Fine brownish buff clay and slip.

² No. 365. Fine clay, gray at core, pink at surface.

³ No. 366. Fine pink clay; buff slip.

⁴ No. 367. Fairly fine clay, grayish black throughout.

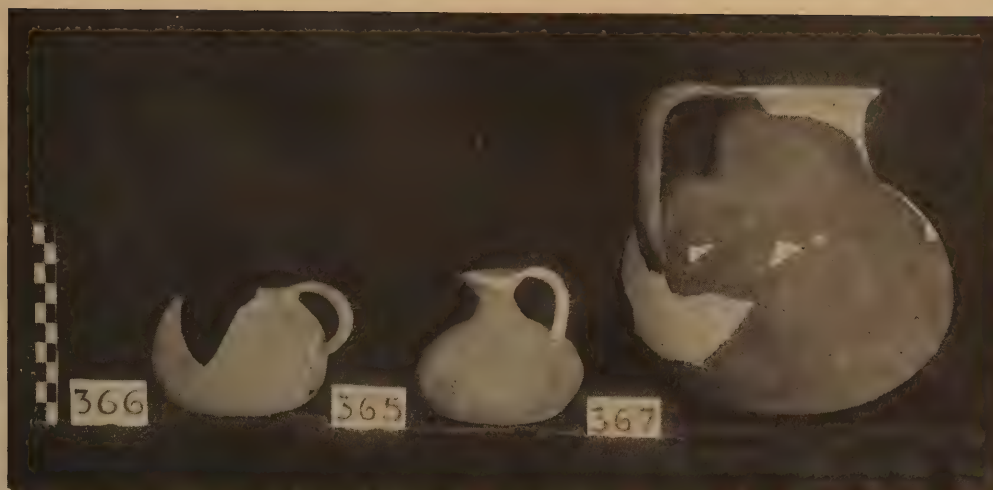


FIGURE 173. THREE ROMAN POTS, FROM DOORWAY OF TOMB XXXV

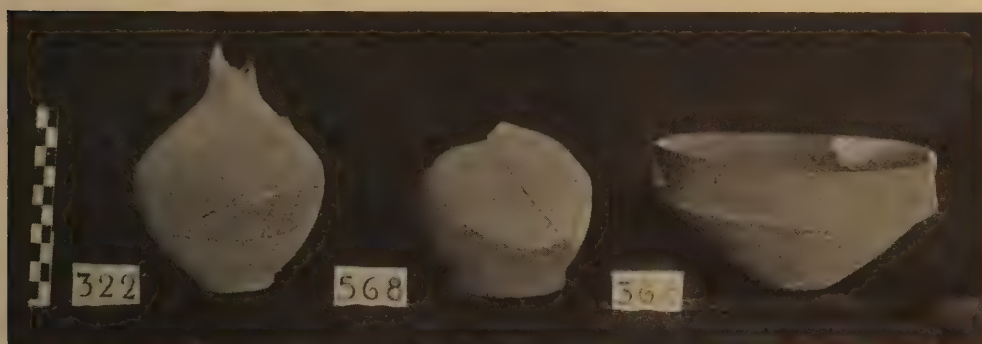


FIGURE 174. THREE ROMAN POTS, FROM SHAFT GRAVES

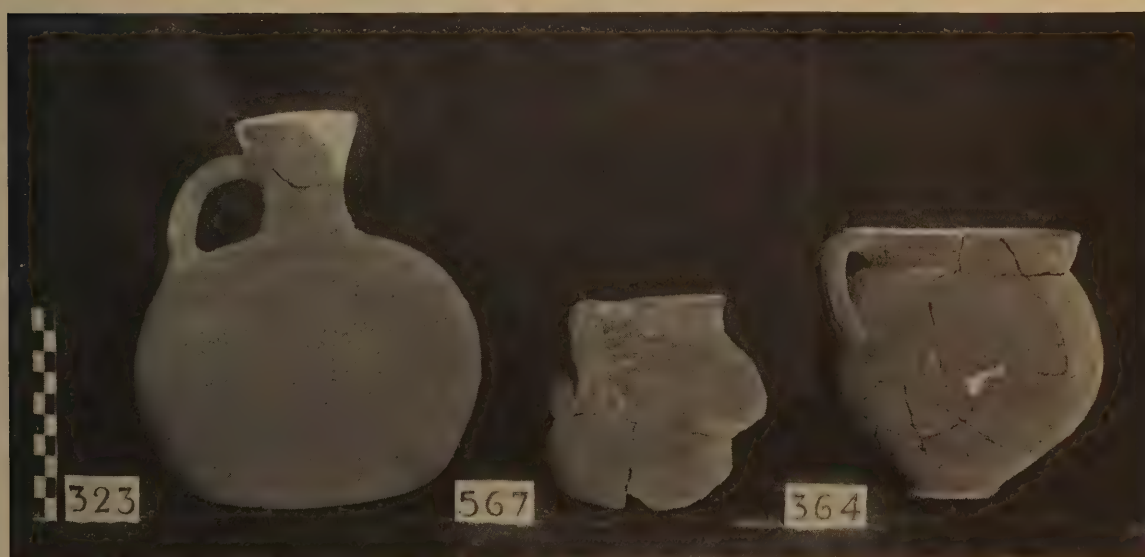


FIGURE 175. THREE ROMAN POTS, FROM TILE-GRAVES

with flaring rim, and one vertical handle (there may have been two originally; the side of the vase is broken away at the decisive point), which rises almost straight from low down on the body and then bends sharply in to the rim. The biscuit is grayish black right through and the surface has the same color; it is not smoothly finished. In the middle of one side is a large dent, which seems to have been made before or during the firing of the pot.

The fabric of No. 366 is almost identical with that of a certain fine type of Roman lamp found at Corinth in a context datable to the end of the first and the beginning of the second century, A.D. Along with the lamps were recovered a good many fragments of jars of very thin black ware exactly similar to No. 367, some of them even marked by the same peculiar kind of dent that we have seen on the jar from the cemetery of Zygouries. Other sherds again show a close kinship with our mottled fabric, imitating glass. In view of this remarkably complete correspondence, we need have no hesitation in assigning the date of these Roman pots to a period about contemporary with the reign of the Emperor Domitian.¹

Although a good many uncovered shaft-graves were opened in the cemetery on the hill of Ambelakia, only three pots were found in them. Of the three one alone is complete; but the vases merit a brief description, since they belong to a period not often treated in archaeological publications.

No. 322, Fig. 174. Missing: handle and top of neck. Preserved height, 0.128 m.; diameter, 0.096 m.² From Tomb XIII. A small jug with oval body, slender neck, and one handle; it has a raised base, concave underneath, with a "button" at its centre. The transition at the shoulder is almost angular. The fabric is coarse, but regular, showing very even wheel-marks; the surface, which bears no slip and no paint, is brick red in color, as is the biscuit.

No. 568, Fig. 174. Missing: handle and neck. Preserved height, 0.092 m.; diameter, 0.093 m. From Tomb XIV. This is the lower part of a small broad jug, standing on a relatively large, edged flat base. It is made of coarse buff clay, pinkish toward the surface, but is well turned, and exhibits the same regular wheel-marks observed on No. 322. On the base appear string lines, showing how the pot was separated from the wheel.

No. 368, Fig. 174. Height, 0.073 m.; diameter, 0.152 m. From Tomb XVII. A small bowl of coarse but firm fabric, made of dark brick-red clay. It has a small flat base (diameter 0.042 m.), spreading body, and a flanged shoulder, from which the side rises slightly inward to the rim, ending in an outward roll. There are no handles. The vase has regular wheel-marks, but the shape was somewhat distorted during the process of manufacture. The unusual flange at the shoulder is a peculiar feature.

The graves hollowed out in the shelter of a vertical ledge of rock and covered by leaning tiles, so many examples of which were found in the cemetery, yielded only three vases.

No. 567, Fig. 175.³ From Tomb VIII. Fragment of a small jar of coarse red clay. It probably had two vertical loop handles, and closely resembled No. 364 in shape; in fabric it is very similar to No. 368, and, like No. 322, it shows great regularity of wheel-marks, which almost give the effect of horizontal bands.

No. 364, Fig. 175. Height, 0.13 m.; diameter, 0.131 m.; diameter of mouth, 0.112 m.⁴

¹ I am indebted to Mr. Oscar Broneer for the dating of the Roman lamps at Corinth.

² No. 322. Coarse brick-red clay. "Button" at centre of bottom.

³ No. 567. Coarse brick-red clay, gray toward core; very porous.

⁴ No. 364. Clay fairly well refined, but porous; gray in color.

From Tomb XI. A small jar of broad shape with a wide mouth; one vertical loop handle is preserved, but there probably was a second corresponding handle on the opposite side of the vase, which is missing. The fractures show a coarse gray biscuit, but the walls are thin and regularly shaped. The rim is made in a technique similar to that of No. 567. There is no slip nor decoration.

No. 323, Fig. 175. Height, 0.192 m.; diameter, 0.169 m. From Tomb XVa. A well-made squat jug with broad flat base, large body, and rather slender neck; there is one vertical handle which joins the neck a little below the rim. The walls are thick and heavy, but the circular shape is very nearly true. The jug is made of fairly coarse pinkish buff clay, well baked, with a fairly smooth surface, on which the wheel-marks appear with uniformity almost as grooves.

A comparison of the vases from the "tile-graves" with those from the shaft-graves — though the material is much less abundant than one might wish — leads to the conclusion that these two types of interment were in contemporaneous use. No. 368 is almost identical with the ware represented by No. 567; and No. 323, though a larger and better example, is closely similar to No. 322. In all cases the character of the fabric and the appearance of the regular wheel-marks are quite the same. The shaft-grave, as such, is certainly a much earlier type of tomb, as remarked above; but if these shafts in the cemetery of Zygouries go back to an older period, they were surely cleared of their original contents and made to serve again at the time when the tile-graves had come into fashion. By the fortunate recovery of a bronze coin of Constantius Gallus in Tomb XIII, as already stated (p. 71), we are enabled to fix this period as not much later than the middle of the fourth century A.D. And it is as examples of the latest kind of Roman pottery found in Greece that these poor vases from Zygouries have their chief interest.

CHAPTER V

MISCELLANEOUS OBJECTS

IN this chapter will be included, more or less in the form of a catalogue, all the objects of metal, terracotta, bone, and stone found in the course of the excavations. They will be considered by periods in their chronological order. Most of these objects are of Early Helladic date and, though perhaps of small intrinsic value, are important as offering new material for the study of Early Helladic civilization; for this reason they should not be passed over too summarily. The Middle Helladic Period is very scantily represented, and, apart from figurines of terracotta, there are not a great many Late Helladic objects to be recorded.

EARLY HELLADIC PERIOD

Gold

1. Small ornament, probably an earring, found beneath skull No. 5 in Tomb XX. It seems to have been cut from a thin sheet of plain gold, and has the form of a roughly circular disk, *ca.* 0.014 m. in diameter (PLATE XX, No. 11). A slender tapering piece of the gold sheet, ending in a point, was left attached at one side; the point has been slightly twisted and bent back to form a wire loop. A hole, *ca.* 0.003 m. in diameter, has been carelessly punched through the face of the disk. The wire loop is so small that it could not possibly have been the direct means of fastening the ornament to the ear (if it is an earring); probably a larger loop of bronze or silver, as in the following example, served as the connecting link.

2. Similar ornament, clearly for the same purpose, found close beside the jaw-bone and teeth, which were the only surviving remains of skull No. 1 in Tomb VII. The shape is quite different from that of the foregoing, though the technique is the same. Here a piece like an elongated diamond in pattern was cut from a thin sheet of gold, the extreme ends being extended in tapering wires terminating in a sharp point. The whole was then folded along its transverse axis and hammered flat at the fold, while the wires were bent until they overlapped slightly, forming a loop *ca.* 0.0125 m. in diameter. The ornament (PLATE XX, No. 7) thus has, as seen from either side, approximately the shape of an isosceles triangle, 0.012 m. high with a base of 0.01 m. It was not attached directly by means of the loop of gold wire, but by means of a second loop of slender silver wire passed through the first. This second loop has a diameter of *ca.* 0.015 m. and is really a spiral, since the wire makes two complete turns; it has a fairly sharp point at either end.

As suggested above, the two ornaments just described are presumably earrings, since each was found in close proximity to a skull and it is difficult to understand what other purpose they could have served. But it must be admitted as strange that in each of the two

graves where they occurred only one example was discovered instead of the two one might expect. It hardly seems likely that Early Helladic custom prescribed the wearing of only one earring; if they are earrings it may be that the mate was in both cases carried away on the occasion of a later burial in the same grave, or of the secondary interment itself. So far as I know, no ornaments of this kind and date have hitherto been found on the mainland of Greece, nor is there any evidence to show that earrings were worn until a much later period. It is not impossible, therefore, that these objects were merely pendant ornaments worn on a string about the neck or otherwise.

3. Three pieces of thin gold wire (PLATE XX, No. 14), bent around so that the ends overlap, and forming in this way three links of a chain. They are of different sizes, the smallest *ca.* 0.01 m., the largest *ca.* 0.02 m. in diameter. Only two were found actually attached together, but the largest lay close beside them and undoubtedly belonged to the chain. There is nothing to indicate its specific purpose. It was discovered in the earth above the floor of House W.

Silver

1. Well-preserved wire pin (PLATE XX, No. 9), 0.112 m. long, from beneath skull No. 5 in Tomb XX. The head was formed by splitting the wire of the pin into two finer wires, each of which was coiled into a spiral, one going to right and one to left, and each making four revolutions. The spirals are *ca.* 0.01 m. in diameter. The pin still has an extremely sharp point. It is identical in type with certain pins in the National Museum at Athens, found by Tsountas in Early Cycladic tombs on the island of Syra ('Εφ. 'Αρχ., 1899, Pl. 10, No. 15).

2. Small disk, 0.0165 m. in diameter, of very thin silver (Fig. 176). It is broken at one side, where there seems to have been a projection *ca.* 0.006 m. wide. The disk bore a simple decoration, concerning which it is not possible to say much on account of the bad state of preservation; it seems to have been executed in low relief (repoussé technique) and three parallel lines following the curve of the circumference are faintly visible. The object, which was found in Tomb VII, was perhaps a pendant or an earring resembling somewhat the example in gold, but without the hole through the disk.

3. A few fragments of badly oxidized silver were found in each of the three Early Helladic graves. The largest, from Tomb XX, measures only 0.026 m. by 0.022 m. and is a remnant of a very thin sheet of metal. It once bore a design made by impressed dots, being almost exactly similar in technique to the silver diadem from Chalandriane in Syra ('Εφ. 'Αρχ., 1899, Pl. 10, No. 1). Unfortunately our fragment is too small and in too ruinous a condition to permit the design to be recognized. A still smaller fragment, from Tomb VII, measuring only 0.018 m. by 0.017 m., seems originally to have borne some kind of impressed design, the nature of which has been totally lost. The bits from Tomb XVI, finally, were barely recognizable as silver.

Though in a wretched state of preservation, these fragments are nevertheless significant and worthy of especial notice; for they can hardly be the remains of anything other than



FIGURE 176. SMALL SILVER DISK, PROBABLY THE END OF SOME IMPLEMENT, FROM TOMB VII

diadems like those found on Amorgos and Syra, and thus constitute an unmistakable connecting link with the Cyclades.

Bronze

1. The well-preserved blade of a dagger, 0.168 m. long, found just south of House Y among the small pebbles and débris which apparently formed the pavement of a narrow street. The dagger (PLATE XX, No. 25) is of the short, broad-hilted type, tapering in a double curve to the point. At the widest part of the hilt it measures 0.052 m. across. Four symmetrically placed rivets, which were found in their original position, had once fastened the handle to the haft. The holes for the rivets seem rather carelessly punched; one of them was cut too near the edge of the blade and has been worn or broken through. The handle, no traces of which were found, was probably made of wood; if the length of the rivets may be taken as a criterion, it was at least 0.013 m. thick. A slightly raised rib runs down the middle of the blade on each side, not markedly ridged, but rather smoothly rounded off. Both edges of the blade are well-sharpened, and the weapon must have been a dangerous one. There is no decoration.

A comparison of the graceful curving lines of this dagger with the more elongated and more nearly straight shapes familiar from Early Cycladic tombs ('Εφ. 'Αρχ., 1898, Pl. 12), which also have much more sharply ridged blades, suggests that we have here a somewhat more advanced type; indeed it bears a striking resemblance to a dagger recently found in a Middle Helladic tomb at the Argive Heraeum. The example from Zygouries, coming from an undisturbed context clearly contemporary with the settlement, presumably belongs to a time near the end of the Early Helladic Period, which was certainly long enough to allow a good deal of development and progress. The affinity of this dagger with the Cycladic type is, however, unmistakable; and quantities of similar daggers, including one almost an exact counterpart, have been found in the tholos tombs of the Mesara plain in Crete (Xanthoudides, *The Vaulted Tombs of Mesara*, Pl. LV, especially No. 1870).

2. A small "spatula" (PLATE XX, No. 10), found *ca.* 0.25 m. southeast of skull No. 5 in Tomb XX. It is 0.05 m. long and increases in width from 0.021 m. at the handle end to 0.023 m. at the tip. It is slightly curved and concave — probably not due to chance — which with the rounded end gives it almost a spoonlike shape. Apparently some 0.03 m. of the total length was occupied by a handle — presumably of wood, since all traces of it have disappeared — fastened by two small bronze rivets, which are still preserved in place. These rivets are 0.015 m. apart and are set somewhat to one side of the long axis of the haft. There are no traces of weathering or wearing to indicate whether or not the handle was of the peculiar pointed shape so well represented from the Cyclades; but the implement itself is obviously very closely related to the spatulae recovered by Tsountas in such numbers from the Early Cycladic graves at Chalandriane ('Εφ. 'Αρχ., 1899, Pl. 10, Nos. 30 to 34). Tsountas suggests that these implements were used especially by women in some process of personal adornment (*ibid.*, pp. 102 f.); perhaps they were of service in the preparation of the powder and paint for tattooing.

3. A similar implement, flat and thin, in a rather poor state of preservation (PLATE XX

No. 22), found in the Early Helladic stratum in Trench V; length, 0.047 m.; greatest width, 0.015 m. One end has two small holes close together for rivets, by which a handle was attached; the other end is slightly rounded. The condition of the metal here does not allow it to be determined with certainty whether or not this is the original end; in any case the bronze is so thin that the implement could not well have been much longer. It was undoubtedly a spatula like that described above.

4. Fragment of a pair of tweezers from Trench V (PLATE XX, No. 19). One complete side and the upper part of the other are preserved; length 0.073 m. It was made of a thin strip of bronze, 0.007 m. wide at the lower end and narrowing slightly toward the top; this was bent sharply over at the middle, the two ends being brought fairly close together so that they could be used for gripping. The one preserved end is slightly rounded; the actual tip may have been lost through corrosion. The implement is quite plain, without embellishment other than an outward wavy curve of the sides near the upper end. Tweezers of the same general type, though not of exactly the same shape, have been found in numbers in Early Cycladic graves ('Εφ. 'Αρχ., 1898, Pl. 12, No. 4; 1899, Pl. 10, Nos. 40, 41, 42), in Early Minoan tombs (Seager, *Mochlos*, pp. 73 f., Fig. 44, PLATE XIX, 28, 33; Xanthoudides, *The Vaulted Tombs of Mesara*, p. 28), and in the early cemetery discovered near Chalcis in Euboea (Παπαβασιλείου, *Περὶ τῶν ἐν Εὐβοίᾳ Ἀρχαίων Τάφων*, pp. 6 and 8, Figs. 4 and 11, Pl. VIII, No. 3); they were probably used as toilet implements for the removal of hair. Similar tweezers recovered from a shaft grave of Middle Helladic date and from a late Mycenaean chamber tomb at the Argive Heraeum (*A. J. A.*, XXIX, 1925, pp. 420, 425), from the First Shaft Grave at Mycenae and from the cemetery of Zafer Papoura (Evans, *Prehistoric Tombs*, p. 115) seem to show that the custom was generally continued to a much later date.

5. An awl (PLATE XX, No. 18), found among the pebbles forming the floor of the west room in the House of the Dagger. It is rectangular in cross section, 0.107 m. long and 0.004 m. thick at its broadest point. It tapers gradually from its point of greatest thickness, reaching a sharp tip at one end at a distance of 0.082 m., and diminishing abruptly to a point at the other end. This latter end was undoubtedly inserted into the corresponding socket of a handle by which the awl could be held and manipulated. The handle may have been made of wood, in which case the sharp upper end of the awl could have been driven firmly into it. Well-made serviceable implements of exactly the same kind were found by Tsountas in the cemetery of Chalandriane ('Εφ. 'Αρχ., 1899, Pl. 10, Nos. 9 and 12).

6. Slender wire pin, 0.073 m. long, broken into three fragments, with head missing. Found under skull No. 2 in Tomb XVI.

7. Substantial wire pin, 0.09 m. long, broken into two pieces and point missing (PLATE XX, No. 8); from Tomb XX. It has a heavy, almost half spherical head, ca. 0.014 m. in diameter and without decoration, of a shape not exactly duplicated in the Cycladic collection in the National Museum at Athens.

8. Part of a wire pin, 0.066 m. long, broken into three fragments; the head and the tip are both missing. This pin was found in the south part of Tomb VII.

9. Wire pin in excellent state of preservation (PLATE XX, No. 17) from House A. From the head to its sharp tip it measures 0.103 m. The head is small (ca. 0.006 m. in diameter)

and has a conical top, resembling fairly closely an example found by Tsountas at Chalandriane ('Εφ. 'Αρχ., 1899, Pl. 10, No. 19).

10. Wire pin, well preserved except for the tip, which is missing (PLATE XX, No. 16). It is 0.087 m. long and has a small, almost spherical or bead-shaped head, *ca.* 0.007 m. in diameter, below which is a raised ring. It was found in House D.

11. Similar pin from the same place; the head is missing. Length 0.09 m.; slightly bent in the middle.

12. Two fragments of similar pins from the same house, D; one is 0.067 m. long, the other, 0.034 m.

13. Fragment of a pin from House Y, of very slender wire; length, 0.075 m.; the point is preserved, but the head is missing.

14. Piece of flat wire, *ca.* 0.24 m. long, and 2 mm. wide, from House A. Uneven in shape and twisted; the ends are bent back to meet, forming a narrow loop. The wire seems to be cut from a thin sheet of bronze and the technique thus resembles that of the two gold earrings described above.

15. Solid flat implement from House W, perhaps a chisel (PLATE XX, No. 21); length, 0.089 m., thickness, 0.008 m.; width at blunt end, 0.015 m.; at middle, 0.017 m., from which it tapers almost to a point (the tip is missing). The edges are slightly rounded, the sides flat; the blunt end looks like a break. It is a well-made instrument, perhaps a pointed chisel of some kind.

16. A sturdy nail found on the Early Helladic floor in Trench V should be mentioned here. It is hand forged, roughly pentagonal in cross section, with a flat, almost square head (PLATE XX, No. 20). The point is not very sharp.

17. A ring made of a very thin flat band of bronze, 0.004 m. wide; from the upper interment in Tomb VII. The ring, which seems to have been quite without decoration, is now in fragments, too badly corroded to be mended. As remarked above, the date of this interment is not certain, but it probably falls in the Early Helladic Period.

18. Fragment of very thin bronze, apparently the slender handle of an ornament or implement, which broadens into a circular disk at the end. The disk, which is pierced by a small hole, is 0.095 m. in diameter; it bears no decoration. The shape of the ornament itself cannot be determined. Length 0.046 m.; from Tomb XXIII.

Lead

In House U was found a thick flat lump of lead of irregular outline; it does not seem to have served any special purpose in its present form, but was probably a reserve supply from which a small quantity could be cut from time to time when needed. It weighs 1265 grammes.

Pithos No. 4, found in the bed of the stream mentioned above, had, as already remarked, a small hole in its bottom, which was found closed by means of a stopper of lead. This stopper is not at all regular in shape, but fitted the opening and had doubtless been poured into place.

Several fragments of lead clamps by which broken vases had been mended came to light here and there about the settlement. The method of repair is the same as that em-

ployed in Mycenaean times, and consisted in boring two neat holes in the adjoining fragments and running lead through them, held together by a substantial connection both on the interior and the exterior of the pot.

Terracotta

1. Figurine, 0.075 m. high, modelled in a rude primitive style (PLATE XXI, No. 1). The head is flat on top¹ and almost triangular in shape, as seen from above; its back is rounded off and its front pinched out to form a long projecting face and nose. The neck is relatively long; below it an irregular protuberance on each side indicates no doubt the arms, the right being larger than the left. No legs are distinguished; the lower part of the figurine is merely a solid stem which widens toward the bottom to rest on a slightly hollowed base. No attempt is made to show the breasts, and there is no indication of sex. But a narrow strip of clay, now missing, seems originally to have been applied on the back, extending from the top of the head to the middle of the back, clearly a plastic rendering of a long braid of hair; and it accordingly seems certain that the intention was to represent a female figure. The head is finished with more attention than the rest of the body, details being delineated in a glaze paint in the style of Early Helladic patterned ware. The paint is mainly reddish brown in color, but exhibits the tendency toward mottling so common in the pottery of the period. The eyes are huge and almond shaped, each having a tiny pupil marked by a dot. A series of short parallel strokes above each eye, continued on the flat top of the head, may be meant to depict eyelashes or eyebrows. The hair is painted on the top of the head and down the back, the plastic braid having also apparently been coated with glaze. The paint now shows very little lustre, but it has the crackled surface typical of Early Helladic glaze badly deteriorated. The figurine was found in a trench dug through the floor of the House of the Snailshells, at a depth of 1.46 m. below the floor, in a pure, undisturbed Early Helladic deposit; it must accordingly be assigned to the middle stage of the Early Helladic Period. Our illustration shows two views: one from the left side and above, the other from the front and above.

This figurine, though crude and primitive, is important and deserves the space given here to its description, for it seems to be the first example of its date and kind to be published. Dr. K. Müller informs me that fragments of similar figurines have been found at Tiryns, but, so far as I know, no complete specimen is available from any other site. It therefore offers us the first adequate evidence for the type of terracotta figurines in use during the Early Helladic Period. This type proves to be totally different from that of the contemporary marble figures; indeed it bears a rather astonishing general likeness (especially noticeable in the pinched-out face and the plastic braid of hair) to the ordinary figurines so common in Late Helladic III. These latter seem to have no easily recognizable ancestors in Minoan Crete and are not indeed especially numerous on the island; they appear rather to belong to that mysterious element which raised the Minoized civilization of the mainland to its greatest height of political power in the fourteenth century B.C. Is it utterly impossible that these late Mycenaean figurines represent the reëmergence of a persistent underlying native type and that their real ancestors are to be sought in the

¹ Our illustration does not show clearly the flatness of the head, since the drawing gives a view from slightly above.

Early Helladic Period in figures such as the one under discussion? The Early Helladic population was almost surely not exterminated during the Middle Helladic invasion; as a subject people it may possibly have kept alive coroplastic traditions, as well as others of a religious nature, which came later to be incorporated among the practices and beliefs of the amalgamated stock. In view of the total absence of any such figurines among the remains of the Middle Helladic Period which have become known up to the present time, it certainly seems bold to venture such a theory based on the discovery of a single figurine; but, pending further discoveries in this field, the explanation suggested above need not be regarded as impossible.

2. Head of an animal with a long neck (PLATE XXI, No. 3). The horns are broken away, and the whole body of the animal from just below the neck is missing. The fragment is 0.048 m. high and 0.033 m. long, this latter being the length of the head. It is made of light buff clay, not especially well purified, but baked fairly hard, and finished with a partial coat of glaze in the style of the pottery of Group B. The color is pale red. The front part of the head and the snout were not painted, but there is a ring around each eye, and on the top of the head and the neck a thicker coat than elsewhere may indicate shaggy hair. The eyes are deeply punched round holes, each with a large raised pupil in it, which contributes not a little to the realistic effect. The snout is long and tapering, but ends in a flat surface. On the whole a rather casual piece of work, it nevertheless suggests that Early Helladic modellers were not without ability and some keenness of observation. The head was found in the southeastern corner of the east room or court of House U.

3. Body of a small animal in a style much inferior to the foregoing. The head and all four legs are missing. The modelling is of the crudest, and the surface bears no trace of paint. The figure may perhaps be meant for that of a dog. It was found in the earth filling the southernmost pithos in the row against the back wall of the large room in the House of the Pithoi. Extreme length of fragment, 0.035 m.; height, 0.023 m.; thickness, 0.015 m.

4. Fragment of the forepart of a bird (PLATE XXI, No. 2), found in Trench V at a depth of 1.25 m., just beneath the floor of an Early Helladic house. It may be from an unusual pot in the shape of a bird, since the base of what may have been a large handle appears just behind the neck; this must have been a fairly high, curved basket-handle. But as no trace of a mouth appears to make the identification as a vase certain, the fragment is included here among the miscellaneous objects of terracotta. It is made of coarse buff clay, not fired to a high degree of hardness. The surface is covered with a coat of glaze of varying thickness in the usual poor style of the later glazed ware, Group B II. It is mainly brown and brownish black in color, depending on the thickness of the glaze, but a splotch of red on the breast betrays the style of mottled ware. In spite of the absence of the beak, the fragmentary condition, and the rather poor technique, the bird's head has a very naturalistic appearance. This may be due in part to the eyes, which are made of circular pellets of clay, applied plastically on each side of the head.

5. Conical object, 0.073 m. high, with a lower diameter of 0.026 m. and a diameter at the top of *ca.* 0.012 m. (No. 2, Fig. 177; PLATE XXI, No. 9.) The surface of the base is slightly concave; in the top is a hole 9 mm. in diameter, which diminishes almost to a point at its bottom, 0.01 m. deep. On opposite sides of the cone, at a distance of 0.015 m. from the

lower end, are two broad sturdy lugs projecting *ca.* 0.01 m. The surface is covered with a smooth durable slip, reddish brown in color, which is brilliantly burnished, except on the under side of the lugs and at the concave centre of the base; the technique is similar to that of the pottery of Group A II. Much effort seems to have been spent on refining the shape which has been meticulously pared down with some delicate implement. It was found in House A. Six other specimens of the same type came to light at Zygouries and will be briefly described in the following paragraphs.

6. No. 3, Fig. 177 (found in House D). Height, 0.091 m.; diameter at bottom, 0.039 m.; at top, 0.016 m. The base is flat; in the top is a hole, 0.012 m. in diameter and 0.027 m. deep,

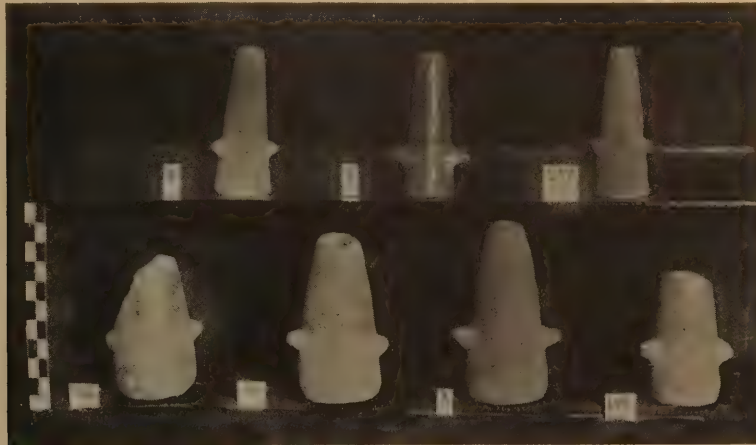


FIGURE 177. SEVEN FIGURINES (?) OF TERRACOTTA, EARLY HELLADIC PERIOD

which grows smaller as it deepens. The lugs, at a height of 0.027 m. from the base, are relatively smaller than on the preceding example. The surface, buff in color, seems originally to have been slipped and polished, but most of the slip has worn off, and marks of the polishing may be seen only in zones here and there. No trace of paring is visible.

7. No. 4, Fig. 177 (found in House D). Height, 0.073 m.; diameter at bottom, 0.028 m.; at top, 0.011 m. The base is flat, but not made exactly at right angles to the vertical axis, in consequence of which the cone stands with a decided list. The hole in the top is 0.042 m. deep. The lugs are somewhat smaller in proportion than in the two preceding examples. On account of the slanting base one lug is slightly higher than the other. The surface, buff in color, now has no slip; it was once polished, but most of the traces of the polishing have worn away together with all the edges.

8. No. 195, Fig. 177. Fragment from House W. Preserved height, 0.068 m.; diameter of the flat base, 0.035 m.; the top is broken away. The lugs are set at a height of 0.02 m.; both lack their tip. The buff surface is slipped and polished; it shows no traces of paring.

9. No. 196, Fig. 177. Fragment, much battered, from the House of the Dagger. Upper part missing; in the fracture may be seen traces of the hole in the top which must have been at least 0.03 m. deep. Diameter of the flat base, *ca.* 0.035 m.; the body swells out a little just above the base. The lugs, which are broken away, were set one at a height of 0.022 m., the other at 0.025 m. The surface, which seems to have a light reddish brown slip,

was polished in zones, the zone containing the lugs being left unpolished. There is no trace of paring. The biscuit, as may be seen in the break, shows a coarse, unrefined clay containing large foreign substances and has not been especially well fired. The thickness of the cone must have made thorough baking under primitive conditions difficult.

10. No. 197, Fig. 177. A somewhat battered example from the House of the Dagger. Height, 0.084 m.; lower diameter, 0.045 m.; upper (damaged), *ca.* 0.021 m. The bottom is flat; the hole in the top is large (0.016 m. in diameter) and deep (0.042 m.). The lugs in this case too are unsymmetrically placed, one being distinctly higher than the other; they were fairly large, but both have been broken. The surface, which is dark buff in tone, seems to have no slip. It was originally polished, including the base and the under side of the lugs; most of the polishing was done in a horizontal direction around the cone, but the zone containing the lugs was rubbed vertically.

11. Fig. 177, No. 237; from the deep trench dug through the floor of the House of the Snailshells. Height, 0.075 m.; lower diameter, 0.028 m.; upper, *ca.* 0.012 m. The base is slightly concave. The hole in the top is rather small, but has a depth of 0.028 m. The lugs, which are much damaged, are set at a height of 0.021 m. above the base. Fully half of the original surface has been eaten away; only at one or two spots, where it remains, are faint traces of polishing discernible.

The seven curious objects described in the foregoing list are not peculiar to Zygouries; similar objects have been found at other Early Helladic sites in the Peloponnesus. But, so far as I know, no examples have hitherto been published, and it has therefore seemed worth while to describe them in detail in the hope of thereby obtaining assistance in their interpretation. For it must be admitted that they still remain an unsolved puzzle to me. From the fact that some of the lugs are polished on the side toward the small end of the cone and left unpolished on their other side, it seems certain that the objects stood on their broader end; this position has therefore been assumed in the description and is shown in the illustrations. The suggestion that they are "stoppers" for some kind of a jug or bottle, which is what the shape at first glance might lead one to think, is thus ruled out; as a matter of fact, not a single example of a vessel with the right kind of mouth and neck to receive such a stopper was found during the excavations.

In every case (with the exception of No. 195, which is broken) we have seen a fairly deep hole in the top of the cone, into which something surely must have been set or fitted. On the analogy of certain figurines found in Thessaly, the body of which was made of terracotta and the head of a pointed stone inserted into a prepared socket in the torso (*Prehistoric Thessaly*, pp. 41, 49, Fig. 25) I venture to suggest that these seven conical objects from Zygouries also are figurines, perhaps descended from a very primitive type. The projecting lugs might then be a crude rendering of the arms. No heads of stone were found, it is true, but they may have been made of some other, perhaps perishable, material, such as wood or bone or ivory. It may be objected that the primitive but unmistakably anthropomorphic figurine described above (p. 185) presents a serious difficulty in the way of the suggested explanation; for it might seem rather unlikely that two types so utterly different should exist side by side. But in the Cyclades, though the amorphous figures no doubt are derived from a much earlier prototype than the anthropomorphic, they nevertheless con-

tinued to be made for a very long period, and in the later phase of Early Cycladic civilization, as represented at Chalandriane in Syra, the two types clearly occur contemporaneously. So here at Zygouries the possibility of the existence of two types in the same period must be admitted.

It is now practically certain that the Peloponnesus was inhabited in the neolithic period by a race quite different from the Early Helladic people to whom must be attributed the introduction of the new metal at the beginning of the Bronze Age. Is it not possible that the survivors of this neolithic race, later absorbed into the Early Helladic stock, kept alive traditions and types of their own alongside the new?

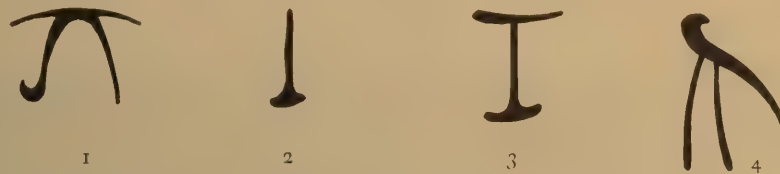


FIGURE 178. SYMBOLS ON SEAL OF TERRACOTTA, ENLARGED

12. A "button seal" from House Y (PLATE XXI, No. 4); height, 0.025 m.; diameter of face, 0.034 m. It consists of a flat, disk-like portion below, on which is the circular face of the stamp, surmounted by a solid rounded top of slightly smaller diameter. A small hole is neatly bored horizontally through this upper part, no doubt for a string by which the signet could be carried. The seal is on the whole rather clumsily made, as if whittled down here and there by a knife; its surface, of a dirty brown color, is not smoothly finished, though it seems to have been lightly polished.

A design rudely executed in incised technique occupies the face of the seal. It consists of a circle divided into quarters by two crossing lines; the ends of the latter do not reach the circumference, but terminate in three cases in a sort of double closed scroll, while the fourth ends against an open curved line. This differentiation, which is not very strongly indicated, may perhaps mark the top or the bottom of the seal. In each quarter is a crudely formed sign, all four of which are different from one another. Three are easy to distinguish, but the fourth is difficult, since it has come into conflict with the scroll.

These four signs, shown in Figure 178 at an enlarged scale, may possibly be symbols of a pictographic character intended to convey a meaning. No. 4, by an effort of the imagination, might be interpreted as an attempt to represent a human figure; Nos. 2 and 3 are also conceivably pictorial; but I can make nothing of No. 1.

This stamp, dating from the Early Helladic Period, is apparently the first of its kind to be found on the mainland of Greece; at any rate no other published example is known to me. Its nearest analogies must be sought in Crete, among the button seals from the Early Minoan tombs in the Mesara plain. On a terracotta seal from Hagios Onouphrios (*Scripta Minoa*, I, p. 117, Fig. 50) a somewhat similar arrangement of a quartered circle appears; here too are symbols in the four quarters, though even more primitive in appearance and less susceptible of interpretation. I can find no other very close parallel, but it seems clear that our seal is not far removed from this Early Minoan group.

When the evidence is so scanty it would be venturesome indeed to assert on the basis of this single seal that writing, even of the most primitive sort, was known in Early Helladic times in the Peloponnesus. Even if it could be shown that the symbols on this seal have meaning, we cannot be certain that it is a native product and not an importation from abroad. An amulet might travel far. Until fresh discoveries make new material and evidence available, it seems more prudent to leave this problem open.

13. Some twenty-five whorls or weights of terracotta were found; they differ considerably in size and present several varieties of shape, as may be seen from the selection illustrated in Figure 179. The commonest type has a broad, flat base, and sides rising at first almost vertically, then curving inward to a fairly large top. The shape, a sort of plump cone, gives an effect of heaviness quite different from the lightness of the Mycenaean examples with

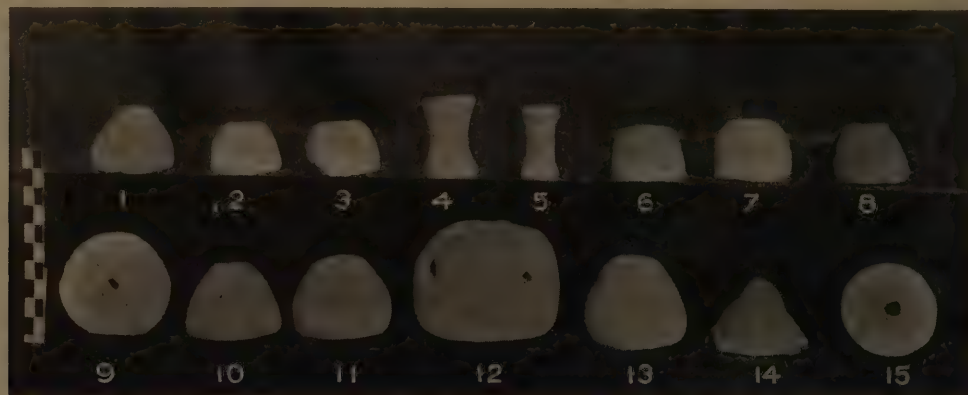


FIGURE 179. SPOOLS AND WEIGHTS OF TERRACOTTA, EARLY HELLADIC PERIOD

their more slender dimensions and almost straight or concave line of profile. In all cases the base has a diameter greater than the height of the whorl. The smallest specimen is 0.025 m. high, with a base 0.038 m. wide; the corresponding measurements of the largest are: height, 0.043 m.; diameter of base, 0.051 m. These whorls are regularly pierced with a large vertical hole. The surface has usually been brought to a fairly smooth finish, but bears neither paint nor polish.

Another variety has a very low, squat shape with the same kind of convex line of profile. A typical specimen measures 0.024 m. in height and 0.053 m. in diameter.

An extremely crude example, the only one of the sort found (Fig. 179, No. 14) has a concave line of profile; height, 0.035 m.; diameter of base, 0.053 m.

14. Two curious wheels or disks came to light, the purpose of which is not clear to me (Fig. 179, Nos. 9 and 15). One has a diameter of 0.048 m. and is only 1 cm. thick; it has a sort of projecting "hub" on each side, perhaps accidentally formed when the large hole was carelessly punched through the centre of the disk. The second, with a diameter of 0.058 m., is thinner than the first and has a fairly sharp edge all around. On one side is a rough protuberance, clearly caused by the piercing of the hole through the centre.

15. Among the remaining objects of terracotta are two small spool-shaped objects with slightly concave ends (Fig. 179, Nos. 4 and 5). Though made of coarse clay and not of careful manufacture, they are finished in the glaze-technique with a reddish brown wash, some-

what mottled in the baking. One is 0.042 m. long and 0.028 m. thick at the end; the other is slightly smaller and of more slender proportions. Neither is pierced.

16. A large block of terracotta, somewhat irregular in shape (Fig. 179, No. 12). Length, 0.077 m.; width, 0.075 m.; thickness, 0.057 m. The sides are all flattened except one, which is slightly convex. The block is pierced longitudinally by two holes, 0.042 m. apart, which run near and parallel to the side opposite the convex face. The clay is not at all well purified, but the surfaces were smoothly finished and seem originally to have been coated with good reddish brown glaze; it has been worn away, leaving only scanty traces. I do not understand the use of this object unless it is a weight of some kind.

17. A crudely made cylinder of unbaked clay may also be mentioned here; it is exactly like those found at Korakou (*Korakou*, p. 104, Fig. 129, Nos. 4 and 5). Length, 0.09 m.; diameter, 0.06 m. The cylinder is pierced longitudinally by two holes, 0.022 m. apart from centre to centre. This object too seems to have been a weight of some sort.

Bone

1. A handle, probably belonging to a knife or dagger of small size (PLATE XXI, No. 5). It is made of fine-grained bone in the form of a slightly tapering cylinder, hollowed out at its lower end for the fitting of the haft of the implement, and with a round knob at its upper end. The handle is 0.047 m. long, of which 0.015 m. belongs to the knob; the latter is a flattened sphere, since its transverse diameter is *ca.* 0.02 m. The lower end of the handle containing the socket has a diameter of 0.0165 m. From the careful, delicate character of the cutting, it seems clear that this handle must have been fitted to an instrument of some value, but there is no clue to its exact nature. The socket for the haft is approximately circular, just short of 0.01 m. in diameter; two small holes opposite each other, bored transversely through the lower end of the handle, show that the haft was fastened by means of a single pin or nail. The handle was found on the floor of the House of the Pithoi.

2. Pommel from the end of the handle of a dagger or small sword (Fig. 180). Length, 0.039 m.; height, 0.02 m.; thickness, 0.013 m. The shape is roughly that of a broad crescent; in the centre of the concave side is a hole, *ca.* 0.0075 m. in diameter, evidently the socket meant to receive the end of the handle. This latter was fastened by means of a nail or rivet passed through a transverse hole from each side. The surface of the pommel was smoothly polished; it is now in bad condition, having apparently suffered from fire, which has given it its blackened color and caused it to crack and split. The damage has now been repaired and the material subjected to a hardening process by E. Gilliéron. In workmanship this piece is very similar to the preceding example.

3. Three whorls or buttons of squat conoid shape (Fig. 181, Nos. 1-3), made of ordinary bone, were found. No. 3, only 0.008 m. high and 0.019 m. in diameter, with a large vertical hole through its centre, is from Tomb XX. No. 2, from House U, is a little larger; the hole through it was apparently bored half way from each side. The

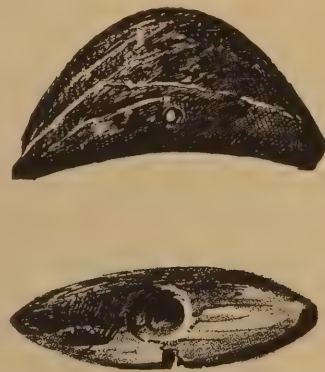


FIGURE 180. POMMEL OF BONE FROM HANDLE OF DAGGER OR SCEPTRE, EARLY HELLADIC PERIOD

largest example, No. 1, from Trench VI, is 0.022 m. high and has a diameter of 0.055 m.; it also has a hole bored from both directions.

4. A thin bone disk, from House U, is shown in Figure 181, No. 4. It looks like a narrow horizontal slice from a whorl or button similar to the preceding; the large hole through it is not accurately centred. Diameter, 0.044 m.; thickness, 0.005 m.

5. Bone pins were fairly common in the settlement, for no fewer than fifteen examples were recovered, though for the most part in a fragmentary condition. Thirteen are of



FIGURE 181. MISCELLANEOUS OBJECTS OF BONE, EARLY HELLADIC PERIOD

a broad flat type, two are half round in section; typical specimens are shown in Figure 181, Nos. 5, 7, 8, 9, 11.

No. 7, which is complete, measures 0.102 m. in length, 0.0135 m. in greatest width. It is pointed at both ends, but more slender and sharper at one extremity than at the other. One side is slightly convex and has a polished surface; the other, which is the marrow side of the bone, is correspondingly concave and rough. The color is grayish brown. The pin is not pierced.

No. 8, which is similar to the preceding in technique and color, is pointed at one end and rounded at the other. Part of the rounded end is broken away, and the extreme tip is also missing. Preserved length, 0.105 m.; width, 0.019 m.

No. 5 has lost its tip; the other end, which is cut off obliquely, is original. The color is dark gray, and the technique is like that of the two just described. Preserved length, 0.101 m.; width, 0.014 m.

No. 11 is a fragment of a pin of a slightly different type. It is not flat in shape, but rounded on one side, hollow on the other, being made from one half of a small bone, split longitudinally. Length, 0.04 m.; width, 0.011 m.

No. 9 is a complete example of this second type. It is sharp at one end, blunt at the other, and polished on both sides. Length, 0.046 m.; width, 0.006 m.

No. 6, of which two fragments are preserved, the middle part missing, seems to have been a broad flat implement, not exactly a pin. One end is rounded (most of it missing), the other tapers, but not to a sharp point. Original length, probably not less than 0.15 m.; width, 0.025 m.



FIGURE 182. PIECES OF HORN, FROM ANTLERS OF RED DEER, EARLY HELLADIC PERIOD

No. 10 in the same figure is a small slender spool, ridged at each end and with a deep groove around the middle. It is smoothly polished. Length, 0.04 m.; greatest thickness, 0.005 m.

Horn

A few fragments of horn were discovered here and there about the settlement, but the material does not appear to have been excessively common. The best piece (Fig. 182, from House D) is the lower part of an antler of a red deer, with the two lowest branches still complete. The upper part of the horn has been cut away, or perhaps sawn, leaving a straight cut. From its base to the tip of the first branch, this antler measures 0.31 m. It was no doubt intended for use in smaller pieces to make handles of knives or sockets for celts or for some

other similar purpose. In the same figure is shown a fragment of a similar antler, which has been cut off near the root.

Boars' tusks occurred fairly plentifully everywhere. They are chiefly very small in size and unworked; fifteen examples of this kind were found in the House of the Dagger alone. Whether they were used as implements of some sort or are merely the remnants of food eaten in the house is not certain; perhaps both explanations are correct.

Animal bones were encountered in almost all the trenches, usually in small fragments which had apparently been cracked so that the marrow could be extracted. Sheep or goats and swine were certainly represented, and there were not a few huge teeth of larger animals. The quantity of such bones found in the street and the alley shows clearly where the rubbish from the houses was thrown.

Stone

1. Fragment of a female figurine of the usual Cycladic type (Fig. 183). It is made of island marble, rather thin and flat. The head is missing, also the right shoulder and the lower part of the body from the waist down; the left shoulder and arm are likewise damaged.

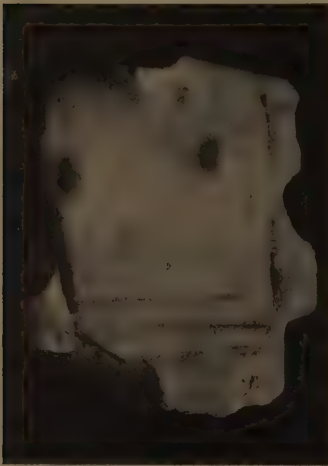


FIGURE 183. FRAGMENT OF A MARBLE FIGURINE OF CYCLADIC TYPE

Height, 0.10 m.; width, 0.087 m.; thickness, *ca.* 0.02 m. The arms, which in their upper part are marked off from the body on either side by a narrow groove, are folded across the abdomen, the left above the right. No hands are indicated, the arms merely tapering to a narrow blunt end. Below the arms appears a fairly deep horizontal line, which, near the left hip, meets a similar line coming obliquely from below; there was here no doubt a triangle similar to that on so many Cycladic figurines.¹ Above the fracture at the back appears the upper end of the groove by which the legs were differentiated.

The fragment was found before the excavations began by Dr. L. M. Prindle, who observed it lying on the surface of the ground near the centre of the hill at a point where Trench VI was later dug. No further example came to light during the excavations.

Marble figurines of the Cycladic type hitherto discovered on the mainland, in Southern Greece at least, are extremely rare, and the battered fragment from Zygouries acquires importance from that fact. Two specimens said to be from Sunium are exhibited in the National Museum at Athens; but the other figures of marble which have come to light in Attica and the Peloponnesus show no Cycladic connection whatsoever; on the contrary they are evidently very closely related to the steatopygous type so well represented among the neolithic remains in Thessaly. Our specimen from Zygouries, as appears indeed from its material, is without doubt an imported article, brought over from one of the islands; and it offers very significant evidence of the intercourse which must have been carried on between eastern Peloponnesus and the Aegean during the Early Helladic Period.

¹ Cf. Tsountas, 'Εφ. 'Αρχ., 1898, p. 196, Pl. 10, 1.

2. Fragment of a small dish or shallow bowl of rather fine-grained white island marble (PLATE XXI, No. 7), found among the masses of Early Helladic sherds filling a *bothros* in the steep west scarp of the hill. The rim is plain on the outside, and has a slightly raised edge on the inside, which appears in our illustration. The bottom of the vase is broken away, but it appears to have had a raised base like that common on marble pots from the Cyclades. The curve of the rim indicates that the diameter of the dish was approximately 0.084 m.

3. Fragment of a small vessel of greenish gray stone containing numerous crystals, probably some kind of marble (PLATE XXI, No. 8). It may have been a bowl, or more probably a pyxis. It stood on a slightly raised base, 0.035 m. in diameter, the centre of which is concave, so that the vessel rested only on a narrow ring along the circumference. The fragment is preserved only to a height of 0.026 m. Its outside surface, including the concavity of the base, is smoothly polished; but the inside seems to have been dug out rather carelessly, as a result of which the interior is very uneven and rough, and the wall of the vase is not of uniform thickness. This roughness of the inner surface in contrast to the smooth polish of the exterior suggests that the vessel had a narrow mouth which did not permit careful finishing inside; and for this reason it seems more likely that the shape was that of a pyxis.

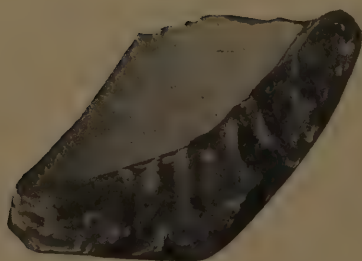
4. Fragment of a large vessel (Fig. 185, No. 1), a chance find from Trench VI. The white marble, of which it is made, with its fairly large crystals, seems to be an island variety, resembling that from Naxos, and the vessel is almost surely of Early Helladic date. Only a portion of the flat base and the adjoining side to a height of 0.06 m. are preserved. That the pot was of large dimensions is shown by the thickness of the walls (*ca.* 0.02 m.); the curve of the base indicates a lower diameter of 0.18 m. Both the inner and the outer surfaces are much weather-worn and the original finish, which seems to have been fairly smooth, but not heavily polished, is no longer in good condition. The vase must have had a fairly wide mouth, since it permitted the interior to be nicely worked; but not enough is preserved to allow the exact shape to be determined.

5. Fragment of a flat vessel, probably a palette, made of white limestone, almost a marble, containing many small crystals (Fig. 184). Height, 0.055 m.; preserved length, 0.144 m.; width, 0.112 m. Found in the northeast quarter of the House of the Pithoi. The palette was rectangular in shape and the fragment is from one corner. It had a flat bottom which is pretty smoothly worked, and the side is rounded off toward the upper edge. Along the edge ran a low rim, 0.012 m. high above the interior, and 0.025 m. wide. From it the interior slopes gradually downward toward the centre where there was a deep rounded hollow.

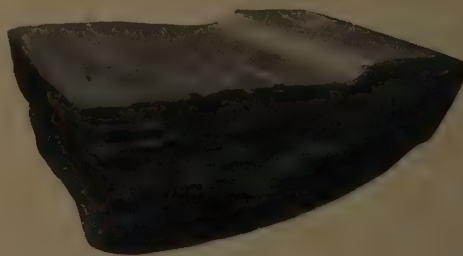
6. Fragment from one side of a large palette of dark micaceous schist, found in House Y (Fig. 185, No. 2). Height, 0.043 m.; preserved length, 0.204 m.; breadth, 0.109 m. The bottom was rounded, rising in a curve to the rim. The palette seems to have been rectangular in shape, but the shallow, basin-like interior probably had an oval outline; this may be deduced from the rim, which is not of uniform width, but increases gradually in a slight curve from a minimum of 0.02 m. as it progresses toward the end of the fragment. The rim rises only 0.01 m. above the interior of the vessel, which is rather uneven and seems to have been worn out in grooves.



FIGURE 184. FRAGMENT OF STONE PALETTE,
EARLY HELLADIC PERIOD



1



2

FIGURE 185. FRAGMENTS OF TWO STONE VESSELS, EARLY HELLADIC PERIOD



FIGURE 186. FIVE SMALL PESTLES OF POLYCHROME MARBLE, FROM YIRIZA

In the National Museum at Athens are several examples of large palettes made from the same kind of material; the closest analogies come from the tombs excavated by Tsountas in Siphnos and Syra ('Εφ. 'Αρχ., 1899, pp. 75 and 100).

7. The Early Helladic tombs yielded six beads of stone, and a seventh came from the settlement. As very few beads of this period have hitherto been published, a brief description may be offered here.

PLATE XX, No. 12. Tiny cylindrical bead of chalcedony; diameter, 6.5 mm.; height, 3.5 mm. It is very nicely cut and is pierced longitudinally; the hole was bored from one side with a conical drill. Found near skull No. 5 in Tomb XX.

PLATE XX, No. 4. Cylindrical bead of fine striated chalcedony; diameter, 16 mm.; height, 5.5 mm. Neatly cut and polished, and pierced for stringing. The hole is broader at one end than at the other and was clearly bored right through from one side with a conical drill. Found near the north end of Tomb VII.

PLATE XX, No. 2. Cylindrical bead of fine chalcedony; diameter, 9.5 mm.; height, 4.5 mm. Well cut, though the ends are not quite parallel, and the bead is therefore not a perfect, cylinder; highly polished, and bored with a conical drill from one side. Found near the east side of Tomb VII.

PLATE XX, No. 15. Flat cylindrical bead of chalcedony with a milky film on one side; diameter, 8.5 mm.; height, 3 mm. It is beautifully cut and polished, with edges rounded, and is pierced for stringing. Found in House L inside a small shallow bowl which lay on the floor.

PLATE XX, No. 6. Small cylindrical bead of soft green stone; diameter, 5.5 mm.; height, 3 mm. The string hole, which is bored from one side with a conical drill, does not quite follow the axis of the cylinder. Found in sifting the earth from Tomb VII.

PLATE XX, No. 13. Small, flat-round bead of grayish black stone. The surface is badly damaged and not many traces are left of the original good polish. The bead has a large string hole which seems to have been bored half way from each side. Diameter, 14 mm.; height, 8 mm.; found in sifting the earth from Tomb XX.

PLATE XX, No. 3. Bead of speckled grayish green stone, 0.03 m. long, 0.02 m. high, and 0.0125 m. thick. It has approximately the shape of a human foot, and a large string hole passes through the "ankle." The hole was bored from both sides with a conical drill and the junction at the centre was not quite true. On the bottom of the foot are seven shallow borings, arranged in pairs, except for a single one on the heel. Presumably this bead was used as a seal and the "ankle" served as a handle to facilitate manipulation in making an impression. The markings on the lower face may have some amuletic significance, and one may wonder if the mystic character of the number seven goes back to Early Helladic times. Some Cretan parallels to this amulet are discussed in the section on chronology (p. 218).

8. Nine small stone spools or pestles were found with a fairly wide distribution over the site. They differ considerably in size and proportions, the smallest example having a length of 0.031 m. and a diameter of 0.011 m., and the largest being 0.052 m. long and 0.03 m. in diameter. They were made of many different kinds of stone, ranging from marble or white limestone to bluish black "Eleusinian" stone. In most cases an effort seems to have been made to select material marked by veining or bright colors, and the pestles were neatly

finished with a smooth polish, which all combines to give a very pretty effect, as may be seen in our illustration (PLATE XXII, Nos. 13-21). They are characteristic household implements common enough at all Early Helladic sites and found in the Cyclades as well (two from Tomb 338 at Chalandriane in the island of Syra, *Εφ. Ἀρχ.*, 1899, Pl. 10, Nos. 35, 36). Examples came to light at Korakou and at Gonia in Corinthia, and some particularly attractive specimens from Yiriza, a small Early Helladic settlement just west of Gonia, are published here in Figure 186.

These objects are almost certainly pestles, though they show little trace of wear; they may have been used for powdering colors in small palettes — a practice, for which Tsountas so acutely observed the evidence in the Cyclades, possibly connected with the custom of tattooing.



FIGURE 187. CUTTING OR SAWING IMPLEMENTS OF FLINT OR CHERT, EARLY HELLADIC PERIOD

The two spools of terracotta described above (pp. 190 f.) are very similar to these stone examples except that they have concave instead of convex or flat ends. They certainly could not have been employed for crushing matter of any hardness and presumably had a quite different purpose from that of the stone pestles.

Obsidian was found in abundance everywhere about the settlement. The quantity of small chips and fragments was very great, and there were also many remnants of cores from which all possible blades and flakes had been struck off. Flakes and blades themselves were likewise very common. The greatest number was collected from the floors of House L, but all the Early Helladic houses were well provided. Usually these blades were not of large size; they average distinctly smaller than those found in the Cyclades, and many indeed are extraordinarily slender and delicate. The longest blade had a length of only 0.068 m. No illustrations are offered here except for a single core (PLATE XX, No. 24) and a delicate blade from Tomb VII (PLATE XX, No. 5).

All this obsidian is very dark in color and almost opaque except at the thinnest points along a sharp edge. It is, of course, an imported material at Zygouries and seems to be of Melian origin; the great quantity that came to light shows that this inland settlement must have been a good market for traders in obsidian.

One small arrowhead of the same material was found in the House of the Pithoi and is apparently of Early Helladic date (unless it had worked its way down from the Mycenaean layer across the northeast part of the house). It is of a short broad type (PLATE XX, No. 23), not symmetrically shaped, nor worked with the delicacy characteristic of Mycenaean arrowheads. Length, 0.0285 m.; width, 0.0175 m. It is very crudely barbed.

Flint was also utilized very generally at Zygouries, if one may judge by the number of pieces found. The numerous small shapeless bits were perhaps used for striking sparks to light a fire. There were likewise many long narrow flakes (Fig. 187), almost exactly similar to the blades of obsidian in shape, but frequently provided with teeth along one or both cutting edges, and thus resembling small crude saws. They are made of several different kinds of chert or flint and occur in a variety of colors: black, brown, brick-red, yellow, cream, and white.

Although the Early Helladic settlement belongs to a stage undoubtedly much later than the beginning of the Bronze Age and the inhabitants were able to produce a weapon of so advanced a type as the dagger described above (p. 182), they had by no means given up the use of implements of stone. Nine celts were found, coming from all quarters of the hill, all of which are shown in PLATE XXII. They are mainly of two different kinds, one of which may be described as long and narrow, and the other as short and broad.

Those belonging to the first group are fairly large celts, almost round in section, slender in proportion to their length, and usually having more or less pointed butts (Nos. 5 to 9). The edge has been ground from both sides. Nos. 6 and 7 were apparently never finished, as they have not been worked down to a sharp cutting edge. The smallest, No. 5, is 0.054 m. long, 0.037 m. wide, and 0.024 m. thick; the largest, No. 7, is 0.099 m. long, 0.037 m. broad, and 0.033 m. thick.

The celts of the second type are small and approximately heart-shaped (PLATE XXII, Nos. 1 to 3). They are much more neatly worked than those of the first type, beautifully polished, and ground from both sides to a sharp edge. The smallest example of the three (No. 1) measures 0.038 m. long, *ca.* 0.038 m. wide, and 0.013 m. thick; the largest (No. 2) varies only slightly: length, 0.044 m.; breadth, 0.038 m.; thickness, 0.013 m.

No. 4 in the same figure, which is also well made, differs in shape from both the foregoing types. It is narrow relatively to its length, and roughly rectangular in section, resembling a celt from the acropolis of Chalandriane in Syra ('Εφ. 'Αρχ., 1899, p. 123, Pl. 10, No. 37).

The material of which these celts were made is of several varieties: a hard bluish black stone is the commonest, occurring in five examples; two others are of greenish stone; one is gray; and one is pink. None of them were bored for the attachment of a handle; they were no doubt held by means of a piece of cleft wood or fastened in a socket made of deer-horn in the manner so well attested for the neolithic period in Thessaly.

Whetstones or hones were represented by three specimens (PLATE XXII, Nos. 10, 11, 12), one from House L, one from the House of the Dagger, and the third from the scanty contents of pithos No. 3 in the bed of the stream. The latter, No. 12, is thin and made of bluish black stone; the other two, of grayish stone, are fairly thick and heavy. All three show considerable wear on both flat surfaces.

Pounders or grinders were the commonest of all these stone implements, more than twenty examples being found on the floors of the houses and elsewhere about the site. The selection shown in Figure 188 illustrates all the various shapes and sizes.

The majority are roughly cubical, or at least have six more or less flattened sides, any of which might be employed for pounding or grinding. Others are almost cylindrical in shape, sometimes with the sides worked indifferently into a series of approximately plane surfaces; and in this type the top and bottom are usually worn from use in rubbing. Three are very nearly spherical (No. 9), two are somewhat conical (Nos. 3 and 7), and one is crudely bell-shaped (No. 5). In these three cases the bottom is the only rubbing surface. The largest pounder, which is of the type with six faces (No. 13, from Trench V), is 0.095 m. long, 0.077 m. wide, and 0.065 m. thick. The smallest, of the conoid shape, but with

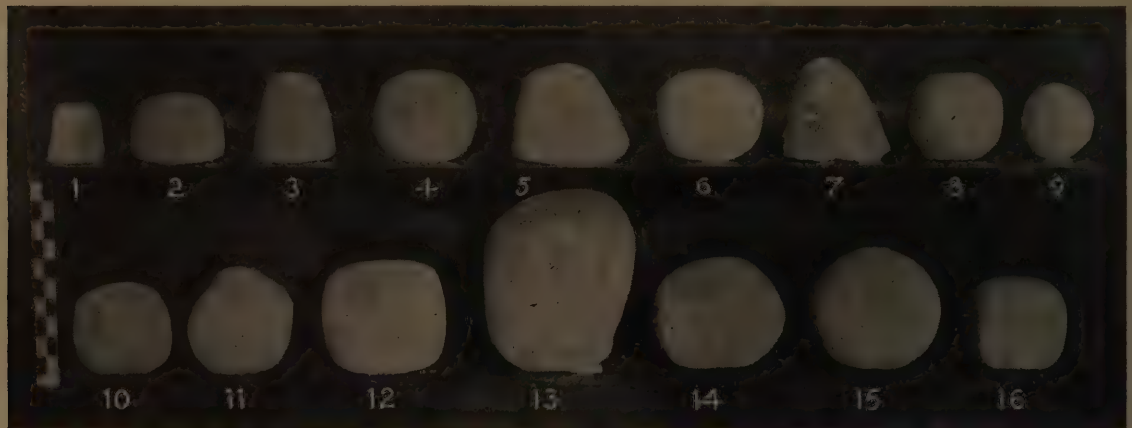


FIGURE 188. STONE POUNDERS AND GRINDERS, EARLY HELLADIC PERIOD

rather elliptical bottom (No. 1, from House U), is 0.031 m. high and has an extreme diameter of 0.026 m. on its lower face.

These pounders were made of different kinds of stone, most commonly a bluish black variety similar to the pebbles and small boulders in the beds of the streams about Hagios Vasilios. Others are gray, white, or yellow stones, apparently from the same source. Two seem to be of some sort of volcanic material (one of these is the bell-shaped specimen) similar to that utilized for the millstones. It was, no doubt, in conjunction with these latter that the pounders were chiefly used, probably in crushing or grinding grain.

There remain to be mentioned, to complete the list of miscellaneous objects of Early Helladic date, only the millstones, of which a good many examples came to light. They seem to have been regarded as necessary pieces of household furniture and one or more appeared in each house. They are the usual saddle-querns, rather narrow in proportion to their length and have roughly elliptical ends. In size they vary considerably, but in general two types may be distinguished: in one the top is a flat even surface; the other has a curved top, being hollowed out longitudinally. This rubbing surface is in all cases smoothly worn. The under side in both types is rounded and only roughly worked, giving a shape suitable for holding in the lap. The material of which they are made is invariably a hard volcanic formation (vesicular lava).

MIDDLE HELLADIC PERIOD

The only miscellaneous objects of this period from Zygouries are those found in Tomb I, and they were not numerous. They are all shown in Figure 189 and include the following:

Bronze

A spiral of bronze wire; diameter 0.028 m. It is made of rather slender wire, circular in section, which makes only one and one-half revolutions and has slightly tapering ends. From the position in which it was discovered, close against the skull, it seems likely that it had served as a hair fastener.

Two fragmentary wire loops, perhaps from a similar spiral, with a diameter of *ca.* 0.024 m. They are made of thin wire roughly rectangular in section.

Six small fragments of a ring which had a diameter of *ca.* 0.027 m. The circle is not complete, and the pieces may belong to a spiral similar to that described above. The wire is round.

Terracotta

A whorl very much like those of the Early Helladic Period, except that it is finished with a somewhat smoother surface and has a base which is concave underneath. It is illustrated in Figure 179, No. 1.

Bone

Fragment of a small round pin; preserved length, 0.038 m. At least one half of it, including the point, is missing. It has a rounded head, smaller in diameter than the shaft itself.

Stone

Nineteen beads of natural crystal, grayish white in color and almost transparent, which formed part of a necklace. The beads, which are small and not uniform in size, have been crudely worked into a cylindrical shape. They are very regularly pierced and the hole was apparently bored half way from each side. So far as I can find, no parallel to these crystal beads is available from the Middle Helladic Period.

Paste

Fifteen beads of paste, which from their place of finding seem to have belonged to the necklace mentioned above. There are two varieties of material and five different shapes.

Nine are made of fairly firm fine paste, dark gray in color; they include one of spherical shape, one (which is also ribbed) like a sphere flattened at its poles, and seven long and narrow examples resembling olive pits (one of which is in fragments). All are regularly pierced for stringing.

Six are made of a somewhat more porous paste, white in color, although the original surface, which has almost entirely disappeared, seems to have been gray. One is of conoid form; the others (one in fragments) are irregular disks of no great thickness. These also are pierced with string holes.

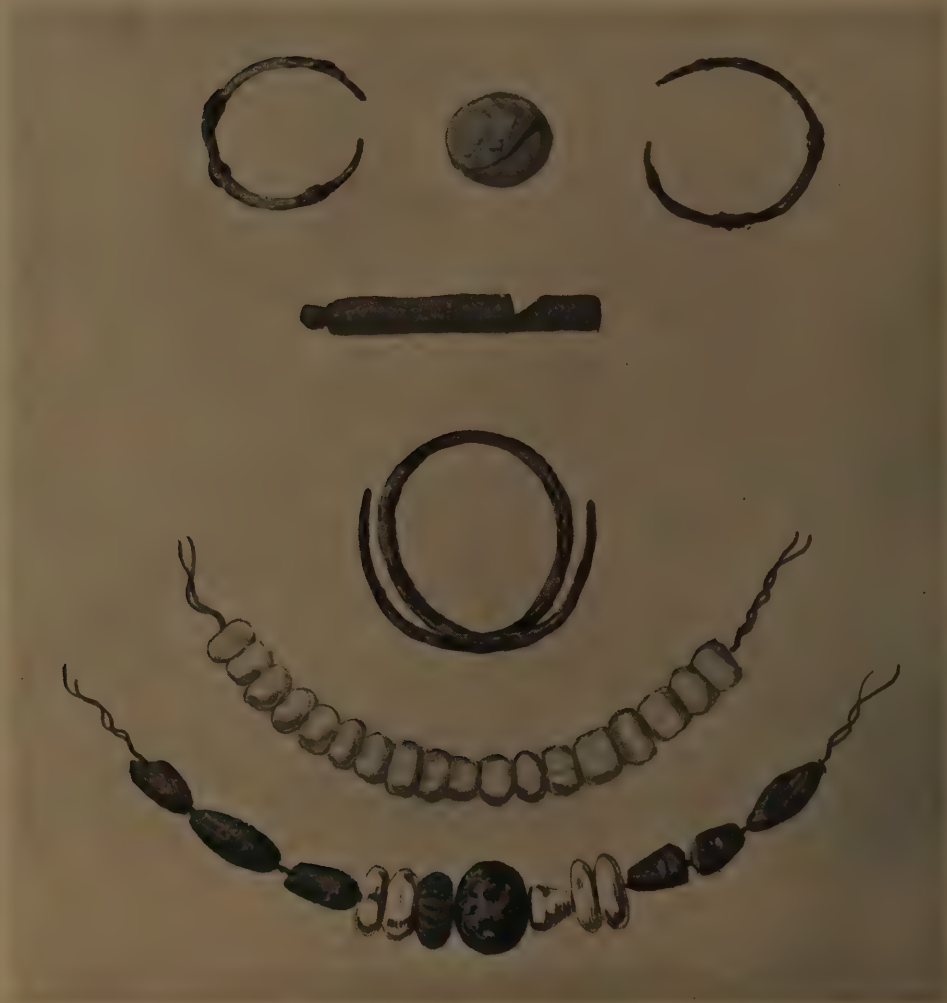


FIGURE 189. MISCELLANEOUS OBJECTS FROM TOMB I, MIDDLE HELLADIC PERIOD

LATE HELLADIC PERIOD

The objects of Late Helladic date, which come next in order, all belong to the third stage of the Period.

Bronze

The bronze knife (Fig. 190, No. 1) found in the "drain trap" just above and west of the Potter's Shop (No. 15 on the plan, PLATE II) has a length of 0.22 m., including the broken tip, which was recovered. Of this total the handle occupied 0.08 m. and the blade 0.14 m. The latter is long and slender, tapering from a width of 0.012 m., at its junction with the handle, to a sharp point. It has one keen cutting edge; the other is much thicker and flat. Incised lines or small grooves run along the top of the blade, parallel to the edge, two on one side, three on the other, with slightly raised ridges between; and these are the only form of decoration.

The haft end of the knife has both edges sharply flanged at an angle of 90° , forming on each face a long groove or socket into which the handle was fitted. As there are no rivet holes, the handle was probably wide enough so that its two faces could be fastened together outside the line of the bronze shank. It was presumably made of wood or bone,



FIGURE 190. BRONZE KNIFE, BRONZE SICKLE, AND OBSIDIAN ARROWHEAD, LATE HELLADIC PERIOD

and is missing; at its outer end, however, it had a small ornamental knob of ivory, traces of which were preserved. Unfortunately it was found in a state so ruinous that its original shape could not be recognized with certainty, and it was only possible to see that it had once borne some kind of carved decoration.

From the Late Helladic layer reached by a trial trench below the west foot of the hill came the small sickle-shaped knife shown in Figure 190, No. 2. Length, 0.195 m.; greatest breadth, 0.022 m. It has a rather thin blade, which tapers in a curve to a rounded end. The shank is very short (0.03 m.) and has one large carelessly made hole for the rivet or nail by which the handle was fastened. Similar knives or sickles, found at Mycenae, are exhibited in the National Museum at Athens, and the type is well known elsewhere.

The only other object of bronze is a well-made point, perhaps the head of a small spear or javelin (Fig. 191). Length, 0.057 m., of which *ca.* 0.025 m. belongs to the head proper and the rest to the shank by which it was fastened to the shaft. The end of this shank is bent, but whether this is original or due to later accidents does not appear. The head is rectangular in section (measuring at its widest 0.007 m. on a side) and tapers to a sharp point.

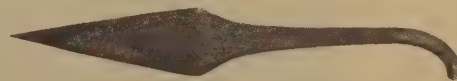


FIGURE 191. BRONZE JAVELIN POINT, LATE HELLADIC PERIOD

Terracotta

The objects of terracotta comprised chiefly figurines of the familiar Third Late Helladic type, but there were also a few fragments of animal figures and a small table.

Apart from insignificant shattered bits, of which there were not a few, some forty figurines were found. Three of these, from Tomb XXXIII (Fig. 192), and eleven from

Tomb XXXV (Fig. 193) are complete; the rest are in a more or less fragmentary condition.

The three from Tomb XXXIII are all of the same type, though they differ in size. They stand on a solid columnar stem with spreading foot, have a body with prominent breasts

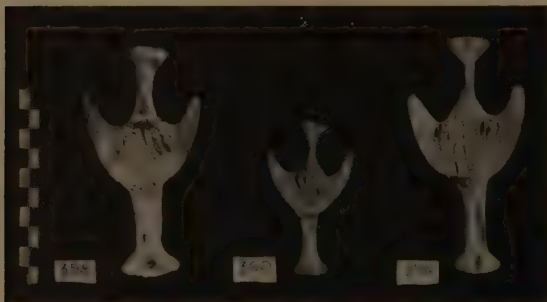


FIGURE 192. FIGURINES OF TERRACOTTA FROM TOMB XXXIII, LATE HELLADIC III

and with crescent arms, a narrow head with pinched-out face, and a circular hat, concave on top. The painted decoration, though varying in details, is essentially the same on all three figures. The hat on its upper surface is plain or ornamented by a circle or a cross; on its under side it bears a border of fillets or short vertical dashes. The ridge of the nose is marked by a line and the eyes by dots. Around the neck is a painted collar. The body bears a series of vertical or oblique stripes;

the waist is indicated by a band, and the stem carries two, three, or four vertical lines. The largest figurine is 0.118 m. high, 0.06 m. wide; the smallest has a height of 0.077 m., width of 0.043 m. The paint in one case is reddish brown, in one brownish black, and in the third black.

The eleven figurines from Tomb XXXV are all of the crescent type and all wear concave hats. Two stand on a hollow stem; nine have a solid columnar stem like that exemplified in Tomb XXXIII. Seven of these nine wear a plastic braid of hair down their backs instead of the painted line of hair which usually appears on the others. The plastic braid curiously rises from the middle of the top of the hat (Fig. 193, all five examples in the lower row), — surely an unreasoning transfer from the bare-headed type of figurine, which is also a very



FIGURE 193. FIGURINES OF TERRACOTTA FROM TOMB XXXV, LATE HELLADIC III

common one in Late Helladic III, — it extends in some cases only to the base of the neck, in others to the middle of the back. The painted decoration of these eleven examples is closely similar to that on the three from Tomb XXXIII, differing only in small details. The largest figurine from Tomb XXXV (No. 341) is 0.126 m. high and 0.058 m. wide; the smallest (No. 340) measures 0.051 m. in height and 0.026 m. in width. The paint is in some instances red, in others brown, in still others black, but often varies, where thin, to an intermediate shade.

From the trench dug through the terrace north of the Potter's Shop, which produced some early pottery of Late Helladic III, came eight fragmentary figurines, all with a solid columnar stem. One is merely the base, giving no evidence for the shape of the body;



FIGURE 194. FIGURINES OF TERRACOTTA FROM THE SETTLEMENT, LATE HELLADIC III

of the remaining seven one belongs to the crescent type, so well represented in the two tombs, and this was found in the uppermost layer. The other six are quite different in shape, having a body resembling a flat circular disk (Fig. 194, No. 3). The heads preserved are hatted (Fig. 194, No. 1), and the decoration of the body is the same as in the crescent type (Fig. 194, No. 3). One of the six (Fig. 194, No. 2) stands out in conspicuous contrast with the others, since it has arms represented plastically. The right arm is bent at the elbow and crosses the bust, the left arm is bent more sharply, with the hand extended toward the face. The left side of the figurine is unfortunately broken, and the head too is missing.

The discovery of six examples of the disk-shaped type, as opposed to only one of the crescent type, in this early context of Late Helladic III suggests the conclusion that the figurines of the former type are the older of the two, and that this shape goes back to the beginning of the Third Late Helladic Period. But until further evidence is forthcoming from other sites and until more is known concerning the origin and purpose of Mycenaean figurines it is certainly more prudent to reserve opinion. It may be that the two types were made to serve quite different purposes; the crescent figures may have been intended purely

for funereal use, those with disk-shaped body for household service. In the meantime this evidence from Zygouries is offered for what it is worth. Several other examples of the disk-like variety came to light on the slopes of the hill, some with a bare head; a plastic braid also occurred on these latter.

In the drain trap above the Potter's Shop were found five heads and two bodies of figurines. Of the heads four have hats and one is bare; none has a plastic braid. The two bodies (Fig. 194, Nos. 4, 5) stand on a hollow stem and have a form differing from both of the types discussed above, though they must be closely related to the discoid variety. They have plastic arms folded so that they meet over the breast, but the execution is so casual and conventionalized that they are hardly recognizable as arms.



FIGURE 195. FIGURINE
OF TERRACOTTA, FEMALE
FIGURE WITH CHILD AT
BREAST, LATE HELLADIC
III

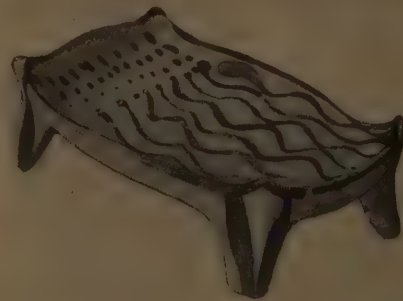


FIGURE 196. SMALL "TABLE" OF TERRACOTTA
FROM TOMB XXXV, LATE HELLADIC III

Still another fragment deserves illustration here (Fig. 195), as a crude attempt to represent a mother with an infant child at her breast. The subject, though not extremely common, is known from other Mycenaean sites (Staïs, *Collection Mycénienne du Musée National*, pp. 109, 132, No. 2493; Winter, *Die Typen der figürlichen Terrakotten*, Part I, p. 2, No. 2). This example, which has the body in the form of a disk, was found below the west slope of the hill.

Five fragments of terracotta figures of animals came from the trench dug through the Potter's terrace, and a few others were collected at other places about the hill. None of these merit more than mention, and the only piece illustrated (Fig. 193, No. 346) is a fragment from Tomb XXXV which looks like the head of a bull with a snout and two curving horns (spread 0.057 m.), but may equally well be the two hind legs and tail of some other animal. It is decorated with stripes of brownish black paint. The rest of the animal was not in the tomb, as all the earth was carefully sifted without a trace of it being found.

The only other object in this category is a small table from Tomb XXXV (Fig. 196, No. 334); height, 0.03 m.; length 0.104 m.; width, 0.068 m. It stands on four legs and is approximately rectangular, but with somewhat bulging sides. The top is not level, but forms a shallow concavity surrounded by a slightly raised rim. The decoration, except for a smear of paint down each leg, is confined to the upper surface; it consists of four transverse rows of dashes and dots at one end, while the rest of the space is filled by eight broad wavy lines

running longitudinally. There is also a band of paint along the rim. The "table" may perhaps be intended to represent a bier used to convey the dead to the tomb.

Ivory and Bone

The ivory knob at the end of the handle of a knife has already been mentioned, and no other objects of the same material came to light. Worked bone was not represented at all; and the only object which might be recorded here is a large boar's tusk from which a slice has been cut on one side. The strip cut away must have had approximately the shape of the curved flat pieces familiar from Mycenae, which, on account of their tough material,



FIGURE 197. MISCELLANEOUS OBJECTS OF STEATITE, FROM TOMB XXXIII

were apparently applied in closely fitting rows as defensive armor on the conical helmets worn by warriors.

Stone

The stone objects of the Late Helladic Period were not numerous. They include two lentoid sealstones, one bead, a dozen whorls, and four shanked buttons, all of steatite, two beads of carnelian, an arrowhead of obsidian, and a small flat piece of polished Crocean marble.

One of the seals (Fig. 198, No. 4, from the impression) was found in the drain trap mentioned above. It represents in intaglio, carved in rather poor style, a goat or stag standing to left with head drawn back. Five slanting strokes just before the body of the animal may be meant to indicate foliage or scenery, perhaps the branches of a tree. Under the body, between the fore and hind legs, is a curious object or sign which I cannot identify, and another above the back is equally unrecognizable.

The second seal (Fig. 197, No. 3) is from Tomb XXXIII and is cut in a style so impressionistic and so careless that the representation is almost impossible to distinguish. It seems to be a fantastic quadruped to left, with a huge body, high slender neck depicted by a single line, and a goatlike head from which rise branching antlers. The confused group of strokes directly before the body may again be an attempt to render scenery; and the whole looks like a very much debased version of the same kind of subject as that on the preceding seal.

The bead, of greenish steatite (Fig. 197, No. 4), is from Tomb XXXIII; it is of a double conoid shape, with a deep groove around its middle, and is pierced transversely for stringing.

The whorls from Tombs XXXIII and XXXV are shown in Figure 197, Nos. 1 and 5, and Figure 198, No. 3; those from the settlement are of the same familiar type, though they offer many varieties of size and color. They were no doubt used as buttons (cf. Persson, *Bulletin de la Société Royale des Lettres de Lund*, 1922-1923, pp. 37 f.).



FIGURE 198. MISCELLANEOUS OBJECTS FROM TOMB XXXV (1-3) AND IMPRESSION OF A SEAL FROM DRAIN-TRAP (4)

The buttons with a shank are sufficiently illustrated by the very good examples from Tomb XXXIII (Fig. 197, No. 2) and from Tomb XXXV (Fig. 198, No. 1). For the shape reference may be made to Professor Persson's remarks, cited above; in the *Bulletin de la Société Royale des Lettres de Lund*, 1924-1925, Plate XXXVI, Persson illustrates a whole series of these buttons, showing the evolution of the shape.

From Tomb XXXV came a small, short cylindrical bead of carnelian (Fig. 198, No. 2) in damaged condition.

A tiny barrel-shaped bead of red carnelian was found in the area just south of the Potter's Shop. It has a preserved length of 0.011 m. (both ends are broken) and is pierced longitudinally.

This list may be concluded with the mention of an admirably worked arrowhead of obsidian from Trench V (Fig. 190, No. 3); length, 0.034 m.;

width, 0.014 m. It has a beautifully symmetrical shape, with curving sides and much reduced barbs, and is similar to examples from Mycenae and elsewhere.

GEOMETRIC PERIOD

A plain ring, made of a wide band of bronze thickened along its median axis so as to be almost ridged; width, 0.015 m.; diameter, 0.025 m. (Fig. 199). The color is very reddish, due to decay of the bronze. Found in Tomb XVIII.



FIGURE 199. BRONZE RING, GEOMETRIC PERIOD, FROM TOMB XVIII

CHAPTER VI

CONCLUSION

THE results of the excavations at Zygouries, which have now been set forth in detail, offer some interesting points of comparison with the discoveries made at other sites in the Aegean area. From the differences here, resemblances there, analogies in one direction, contrasts in another, one may legitimately recognize very close contact on one side, almost if not quite total lack of connection on another; though naturally this method of comparison must be applied with caution. The objects recovered are very largely the result of chance in selection, preservation, and discovery; equally important or even far more significant objects may by the same chance have escaped notice, been lost, or have suffered complete destruction. Nor is it always certain that two objects of precisely identical form are necessarily related or even descended from a common prototype; in dealing with simple primitive artifacts which presumably were made to serve the same purpose, one cannot deny the possibility of independent origin. But when striking similarities show themselves in many instances among several different classes of remains from two widely separated areas, and are accompanied by objects of which the imported character is beyond a doubt, there can be no question that they indicate close interrelations.

As the preceding four chapters sufficiently show, it was in remains of the Early Helladic Period that the site at Zygouries was preëminently rich. The relatively slight depth of earth covering the settlement permitted easy exploration on a much more satisfactory scale than had hitherto been possible in a Peloponnesian establishment of so early a date; and the new material now made available for an understanding of Early Helladic civilization is noteworthy both in quantity and comprehensiveness. It thus becomes especially interesting to submit this material to the test of comparison with the contemporary remains in other areas.

It is at the outset clear that we must recognize the complete identity of the culture represented at Zygouries with that of the other contemporary settlements in northeastern Peloponnesus. A mere glance at the remains is conclusive on this point. As we have seen above, Zygouries lay near the intersection of the two main travelled roads connecting the Isthmus and the Argolid and naturally must have felt the force of the current of traffic passing between these two important centres. The distances are not great, the roads are easy, and there can be no question that impulses were speedily transmitted from one side or the other. The numerous flourishing settlements in Corinthia must have maintained constant and close communications with the towns at Mycenae, the Argive Heraeum, Tiryns, and Argos (the Early Helladic establishment of Argos apparently lay on a hill called "Makrovouni," a short distance to the west of the Aspis toward the ravine of the

Charadra; cf. *Πρακτικά*, 1916, p. 76; the potsherds found here are Early Helladic, not neolithic) and we have manifestly a unity of civilization in this whole area.

Apart from the complete general agreement in the remains that have been brought to light, only one or two specific points of comparison need be mentioned. In the recent excavations at the Argive Heraeum the scanty vestiges of a tomb exactly similar to the cave-ossuaries of Zygouries were found (*A. J. A.*, XXIX, 1925, p. 419). At Tiryns, moreover, according to information kindly given me by Dr. K. Müller, fragmentary figurines of terracotta have been recovered, belonging to the same type as the specimen from Zygouries described above; and among the other small finds were included several examples of the peculiar conical objects, which, as we have suggested, probably constituted a second and more primitive type of figurine.

The connections with more distant areas which we may deduce from the evidence revealed at Zygouries must, therefore, be accepted as applying with equal force to this whole homogeneous region of northeastern Peloponnesus; it is in any case obvious that any influences from outside must have passed through the gateway on one side or the other before they could reach the interior valley of Cleonae.

The one external region with which direct and close contact was certainly maintained was the Aegean, as represented by the Cycladic Islands; and the evidence for this connection, which is based on a great many analogies, resemblances, and specific importations, is so strong and comprehensive that we must considerably enlarge our ideas of the extent of trading relations and traffic in this corner of the world in the early Bronze Age. It has been held by many historians that "trade" and "traffic" in this early period are scarcely more than euphemisms for casual raiding enterprises and piracy; but the abundance of contacts between Zygouries and the Cyclades, and their character, can hardly mean anything else than that there was a fairly well-organized and established commercial activity. It has elsewhere been pointed out that the people dwelling in these two regions during the period under discussion were evidently very closely akin, forming doubtless two branches sprung from a common parent stem (*B. S. A.*, XXII, p. 180); the strong racial ties which almost certainly continued to subsist between them, were without doubt sufficiently felt and recognized to promote the maintenance of mutual intercourse and trade. Indeed there is good reason to believe that the same language, though perhaps in dialectal variations, was spoken in both areas; a tabulation of the pre-Greek place-names according to their geographical distribution, prepared by Dr. Haley, makes it clear that topographical names of the same non-Greek character are common to both.¹

In the foregoing chapters describing the remains uncovered at Zygouries the most important and specific Cycladic analogies have in each case been mentioned; here this material will be briefly recapitulated to show its variety and extent.

In the field of architecture not much can yet be said. The remains of houses of the Early Cycladic Period are too scanty to permit a satisfactory comparison. Only at Phylakopi in Melos has a considerable settlement of this date been excavated, and here the maze of superincumbent remains of the Middle and Late Cycladic towns made it impossible to clear a sufficiently large area of the Early city to show the complete plans of representative

¹ This study is ready for publication, but has not yet appeared.

houses. The evidence seemed to point to the existence of dwellings composed of single rooms as well as of two-roomed houses; and apparently they were built closely together, forming after a fashion a more or less connected town plan of the kind which was carried to a much more advanced stage of development in the Middle and Late Cycladic Periods. No good parallel to the rather characteristic two-roomed houses at Zygouries is available among these very scanty remnants of Phylakopi I; but the general aspect of the settlement as a whole cannot have been far different from that we have seen at Zygouries. More than this we cannot say until fresh discoveries shed more light on the early architecture of the islands.

In a comparison of burial customs and the type of tombs in use the situation is reversed, for here the evidence from the Cyclades is especially abundant, while that from Zygouries and the mainland is disappointingly meagre. At first impression this evidence, so far as it goes, appears to establish a clear-cut difference rather than a similarity of practice. Nothing has been found in the islands at all resembling the rude cave-ossuaries in the cemetery at Ambelakia; nor on the other hand has the mainland yet produced cist graves of Early Helladic date in any way analogous to the type so common and characteristic in the contemporary Cyclades. It is admittedly possible that the shaft graves on the hill of Ambelakia, some of which were found empty of remains, while others had been re-used for burials in the Roman Period, are actually of Early Helladic construction; but even if this were so, they could not be regarded as forming a close parallel to the stone-built cists of the islands, and the practice of secondary burial seems quite foreign to Cycladic usage.

This sharp divergence apparent in the type of tomb employed is all the more striking in view of the remarkable similarity of the objects found in the graves themselves. For here, though the material from Zygouries is not abundant, we meet with certain objects so nearly identical with many found among the deposits in the Cycladic tombs that they cannot be explained as due to coincidence alone or to anything other than direct and close relations. Chief among these are the silver diadems, sadly decayed remnants of which came to light in all three of the undisturbed Early Helladic tombs. They are clearly counterparts of the diadems found by Tsountas in Amorgos and Syra, of which so many similar examples in gold were discovered by Seager in the Early Minoan tombs at Mochlos in Crete. These latter frequently bear patterns formed by dots in repoussé technique, a type of ornament recurring in more elaborate form on the silver band from Chalandriane, and of which faint traces may be recognized, as we have noted above, on the crumbling fragments from Zygouries. The agreement thus shown in these three regions in depositing with the dead objects of so specialized a character as the diadems in question surely points to an identity, in part at least, in burial custom.

The silver and bronze pins from the ossuaries in the Ambelakia cemetery, moreover, are practically replicas of certain pins from the Cycladic tombs, from which circumstance perhaps it might be warranted to deduce some degree of similarity in the clothing worn. Similarly the spatulae and the tweezers, which again are counterparts of the Cycladic examples, may be more than a suggestion that the mainland fashions of toilet were modelled upon those prevailing in the islands. The stone beads, also, can be fairly closely matched among the objects found in the Cycladic tombs and, though the exact form of the amuletic

stamp in the shape of a human foot is not duplicated among the island finds (it occurs in Crete), the same principle of talismanic charms seems to be represented.

The two gold pendants from Tombs VII and XX, which may be earrings, are not yet paralleled among the jewelry known from the Cyclades, but certain analogous forms recovered from the tholos tombs of the Mesara (Xanthoudides, *op. cit.*, p. 29; p. 111 and Plates XV and LVII, No. 484, from Tholos A at Platanos) imply that their affinities are not foreign to the Aegean sphere.

These coincidences in so great a variety of funeral offerings are surely not due to chance, and we are justified in concluding that related customs and practices prevailed in both areas, and that there was also regular intercommunication between the two.

But the close relationship is not shown merely by funeral usage; it appears no less strikingly in the pottery. Thus in the early deposit from the west side of the hill at Zygouries were found many specimens which are hardly distinguishable from Early Cycladic wares. This is especially the case with the incised fabrics which bear in shallow technique the linear designs — notably the herring bone — so characteristic of the early group of wares from Paros, etc. Some of these examples indeed at Zygouries, from the abundance of mica in their clay, seem to be of foreign manufacture, and there can hardly be ground for doubting that they are direct importations from the islands. Not only the incised pots, however, betray this strong Cycladic connection; many of the fragments of plain ware show it with equal clarity. Unfortunately this material was too shattered to allow the reconstruction of complete shapes; even though they are not exactly identical with those commonest in the islands, the essential kinship of the ware is nevertheless unmistakable. The mat impressions observed on a good many bases of large coarse pots may be mentioned here, as being precisely similar to those found at Phylakopi; and the occurrence of the impress of a leaf on the bottom of a small shallow bowl, exactly like the imprints found by Tsountas in Amorgos and Syra, is surely not a mere chance coincidence.

If some of the vases at Zygouries, conspicuously different from the local fabrics by reason of their micaceous clay, are, as stated above, clearly importations from the Cyclades (and Aegina must presumably be reckoned as belonging to the Cycladic sphere and a very probable source of importation), there can hardly be a doubt that the operation was carried out reciprocally in both directions. Among the ceramic material from Phylakopi as well as that from Naxos and Syra are not a few specimens made of clay quite different from that usual in the islands, and almost surely products of mainland potters; the importance of this ware as an early link between the two regions has already been pointed out by Dawkins and Droop (*B. S. A.*, XVII, p. 16).

However great the reciprocal influences may have been, we cannot of course speak of an identity of pottery at any time in the two regions, for that would be quite contrary to the facts. What we are arguing is that the evidence indicates, not a complete identity of civilization, but merely the maintenance of reciprocal relations and connections on a fairly regular and comprehensive scale. The bulk of the pottery from the Cyclades was always different from that on the mainland; each group stamped with a character of its own. The course of development was also quite different, the island ware coming early under Cretan influence, which greatly accelerated its development; whereas the mainland ware

seems to have pursued an independent and less rapid evolution, which was finally abruptly terminated by the political events which heralded the opening of the Middle Helladic Period.

Enough has been said concerning the pottery, though its testimony must be regarded as an important factor in the problem under consideration, and we may now turn to some of the objects described in the chapter on the Miscellaneous Objects.

The bronze dagger from House U is not without significance in this discussion. As we have seen, its closest analogy is found in a weapon from a tholos tomb at Platanos in Crete, dating from Early Minoan III — Middle Minoan I; of a rather more advanced type than the daggers from Amorgos, it no doubt belongs near the end of the series which begins there; and with this somewhat later stage its place of discovery in the Early Helladic settlement at Zygouries (Early Helladic III) is in complete agreement.

It is, however, in the marble figurine and in the vases of stone and marble that we meet the most convincing evidence of Cycladic contact. The figurine, even though in a badly mutilated state, manifestly declares itself to be of island manufacture both by its material and its technique; and the vessels of marble, and the stone palettes are hardly less emphatic in the assertion of their Cycladic origin. Here, then, we have a well-defined group of objects the importation of which is beyond dispute. And to this may be added the great quantity of Melian obsidian found everywhere about the settlement. The stone and marble spools, on the other hand, since they seem to be so common at Early Helladic sites, may perhaps have been of native workmanship; but even these do not lack Cycladic parallels.

In view of all these points of contact, which undeniably have a powerful cumulative force, it seems to me that the extent of the Cycladic connections of northeastern Peloponnesus in the Early Helladic Period, as set forth in the opening paragraph of this section, has not been unduly exaggerated. The two regions were certainly united by close and regular bonds; and the demonstration of this fact in a manner more definite and unmistakable than has heretofore been possible may be looked upon as one of the chief contributions of the excavations at Zygouries.

In comparison with the mass of evidence bearing on the mutual relations between the mainland and the Cyclades, the material pointing to contact in other directions is relatively scanty. But certain objects found, though few in number, are none the less explicit in their implication of connections with Crete.

For the early part of the period, it is true, the evidence is not very tangible; in fact it is mainly in considerations of a general nature rather than in specific instances that such a connection can be postulated. The pottery of the two areas certainly differs markedly as a whole; yet in the best mottled fabrics of Zygouries and other mainland sites it is difficult not to recognize a family likeness with the similar but more highly developed ware first found by Seager at Vasiliki, and now familiar as a fairly widely diffused Early Minoan type. The shapes represented are not at all identical; each sphere has its own characteristic forms; and yet here too some degree of affinity is not impossible between the Cretan jugs with prominent side spout and the Early Helladic sauceboats. The two forms seem to be the expression of a rather similar feeling. But it is perhaps rather the underlying principle of the technique of mottling that provides a more substantial bond, though even this is

hardly strong enough to justify the assumption that the Minoan fabric stands in a parental relation to the ware of the mainland. Perhaps the resemblance is no more than can be explained as due to a more remote common origin.

If this comparative material, which may be referred back to the earliest stages at Zygouries, is, accordingly, still of very indefinite nature, the latest phase of the Early Helladic Period, at all events, has given us some specific and significant analogies. On the architectural side there is indeed very little sign of connection. The simple two-roomed houses at Zygouries have not much, if anything, in common with the many-chambered dwellings in Crete, which attained such an astonishing development in Middle Minoan times; nor is there yet any trace of larger structures at all comparable to the palatial establishments of the Cretan centres. And yet in the town system at Zygouries, however primitive and crude it appears, we may perhaps not be wrong in seeing some faint reflection of the "city plans" which found their best Early Minoan expression at Mochlos and Pseira and other East Cretan sites.

The evidence from the type of tombs discovered in the Ambelakia cemetery gives support for more definite conclusions; for the cave-ossuaries, which up to the present time are quite unparalleled in the Cyclades, apparently have some fairly close analogies in Crete. Indeed it cannot be doubted that they belong to the same primitive class of interments represented variously by the cave burials at Epano Zakro (*B. S. A.*, VII, pp. 142 ff.), the rock shelters at Hagios Nikolaos near Palaikastro (*B. S. A.*, IX, pp. 336 ff.), and the bone enclosures of Palaikastro itself (*B. S. A.*, XI, pp. 269 ff.; cf. also VIII, pp. 290 ff. and X, pp. 197 ff.), further examples of which were found at Gournia (*Transactions Univ. Pennsylvania*, I, pp. 20 f.), Hagia Photia (*ibid.*, I, pp. 183 ff.; *Gournia*, pp. 56, 60), by Seager at Mochlos (Tombs VII, VIII, and XVIII, *Mochlos*, pp. 56 f., 69 f.), and more recently in an impressive example by Xanthoudides at Pyrgos (*Ἀρχ. Δελτ.*, 4, 1918, pp. 136 ff.). In most of these instances, which are by no means uniform, but exhibit considerable differences in detail, we are clearly dealing with secondary interments, a practice which is no doubt also to be assumed at Zygouries. It would hardly be safe, nevertheless, on the basis of this community of custom to venture a far-reaching theory of interrelations. When we turn to some of the small objects found in the settlement, however, we stand on much firmer ground. One need not insist too strongly on the import of the bronze dagger which has already been mentioned several times as being almost a duplicate of a weapon from one of the tholoi at Platanos. But the button seal of terracotta from House Y and the seal impression on the side of an unpainted bowl found in House U are unquestionably marks of direct Minoan influence and form a welcome addition to the small group of similar objects recently discovered at Asine. In his discussion of these finds (*Bulletin de la Société Royale des Lettres de Lund*, 1923-1924, pp. 162 ff.), Professor Persson has made it clear that the provenience of these mainland specimens is to be sought in Crete, where their associations are with the seals and stamps found in such abundance in contexts of Early Minoan III and Middle Minoan I. The seal and the impression from Zygouries, the nearest Cretan parallels for which have been cited above (p. 189), correspond very closely in character to the examples from Asine, and like these latter belong to the latest phase of the Early Helladic Period (Early Helladic III). To the great chronological importance of this new material, which Professor Persson

has convincingly pointed out, we shall soon return; here we are concerned with it for the moment only as establishing beyond reasonable doubt the fact that the Early Helladic people of northeastern Peloponnesus kept in touch with their kinsmen of Crete, though the contact seems to have been far less sustained than that with the islands of the Cyclades.

The Early Helladic cultural area certainly extended as far north as the borders of Thessaly, perhaps beyond, colored doubtless from place to place by minor local differences; but nothing came to light at Zygouries which could be interpreted as constituting any special bond in this direction. Some instructive comparisons would surely have offered themselves if the contemporary architectural remains at Orchomenos had been revealed in a better state of preservation. Unfortunately, however, the buildings at this site had suffered almost total destruction and not a single complete plan could be recovered. The existence of rectangular and apsidal houses side by side, as restored by Bulle from the fragmentary remains, is an interesting phenomenon here and introduces an element which is quite foreign to the settlement at Zygouries, where the houses were all without exception of rectangular plan. Another feature which may also have a local explanation at Orchomenos is the great abundance of *bothroi*, both inside and outside the houses. In the south, as represented by Korakou, Gonia, and Zygouries, these pits are far less numerous, though some examples do occur. It is curious that not a single *bothros* was found beneath the floors of the ten houses of the settlement excavated at Zygouries; the few examples discovered, lying in the west scarp and immediately below the hill, appear to belong to an earlier stage of the period than that to which the settlement must be assigned.

In the pottery too some differences appear, though the bulk of the ware in the two regions is very closely similar. The most noteworthy of these differences concerns two classes: the early polished red-faced ware, which, accompanied by vases bearing incised decoration in the Cycladic style, is very common in the south, is, so far as is yet known, rather scanty in the north. On the other hand, the patterned class exhibiting designs in white on a dark ground, so abundantly represented at Hagia Marina and at Orchomenos, has, up to the present time, appeared only in very small quantity in the south. Indeed, at Zygouries, among the vast number of fragments handled, hardly more than half a dozen sherds of this type could be recognized.

It is still too early to attempt an explanation of these differences within the Early Helladic sphere; much enlightenment may be anticipated from the excavation of further sites in central and northern Greece. With regard to the westward extent of this civilization, we are also still very much in the dark, since intensive exploration in this direction has hardly yet begun. The discovery of characteristic Early Helladic pottery at Levkas, however, holds out interesting possibilities (Bossert, *Altkreta*, Plate I, 1 and 2).

In concluding this survey of the external relations of the Early Helladic settlement at Zygouries, in so far as they can be recognized from the remains brought to light, we may briefly sum up the conclusions reached. Zygouries was a typical small town of northeastern Peloponnesus, sharing in a more or less uniform civilization which extended from the south of Greece to beyond the Malian Gulf. Lying just beside an important crossing point of land communications it seems to have kept in close touch with its neighbors to north and south, and in spite of its situation in an interior valley, it was thus by no means isolated. From

the beginning to the end of the period it evidently maintained regular and active communication with the Cyclades, and we have seen grounds for believing that a not inconsiderable interchange of exports and imports was carried out between the kindred peoples in these two areas. This foreign contact by the end of the period had certainly been extended as far as Crete, and we have noted the appearance of Cretan influence in the very significant form of the use of seals of a characteristic Minoan type.

In striking contrast with the abundance of material of Early Helladic date the Middle Helladic Period at Zygouries offers us nothing for comparison with the results of excavations in outside regions. The very paucity of the remains is certainly in itself significant; it must mean that the Middle Helladic occupation was of very limited scope. In a period of disturbance and movement of peoples on a wide scale it is not surprising that this retired inland valley should cease to play a part in the intersectional activity of the day; the external contacts of a modest settlement such as this could be maintained only in a time of settled peace and security. At all events it seems clear that the hamlet which succeeded the flourishing Early Helladic town had no independent contact with the outside world, but was merely one of the many minor rural positions seized upon by the invaders who swept down through the southern mainland and brought Early Helladic civilization to an end; and as such its relations were presumably limited to its own immediate homogeneous neighborhood.

As an unimportant community, perhaps subject to a larger centre, it continued to exist into Late Helladic times, attaining in the third stage of this latter period once more some measure of prosperity. By this time the rise of great strongholds and the concentration of royal power on the mainland had no doubt completely subjected all the outlying small towns and reduced them to a common Mycenaeanized cultural level, though open again to outside influences which reached them through the capitals. The dependency of Zygouries upon Mycenae, at any rate, is complete, and its indirect wider connections require no further discussion in this place.

Chronology

For the relative chronology of the three Helladic Periods of the Bronze Age the evidence from Zygouries comes squarely to the support of the system established on the basis of the results of the excavations at Korakou. This has been clearly enough set forth in the preceding chapters in the description of the objects found, and not much further argument is needed here. It is true that a complete sequence of stratification showing well-marked lines of division like that at Korakou was not discovered at Zygouries; but the chief dividing line was indicated in another way with equal clarity. The houses of the Early Helladic settlement unquestionably came to an abrupt and simultaneous end as the result of a conflagration, and were never rebuilt; on the contrary the sites where they had stood were for the most part abandoned and only here and there reoccupied by insignificant structures of the ensuing period. The sharp break between Early Helladic and Middle Helladic is amply demonstrated by the great contrast between the abundant remains of the flourishing Early Helladic town antedating the fire and the insignificant relics of the subsequent Middle Helladic occupation. It is in fact not at all certain that we must not recognize here a stage of complete abandonment of the site; the scanty Middle Helladic remains might well be

the result of a new settlement toward the close of the period just before the overwhelming inrush of Cretan influences transformed the civilization of the mainland into its Minoanized Late Helladic form.

The evolution of this native Middle Helladic culture under the impulse of the transforming Minoan wand is here, as elsewhere, unmistakable in the remains of the period brought to light, even though they are so exceedingly scanty. Thus we see in the pottery Gray Minyan ware and Yellow Minyan, and finally, when the Cretan technique of lustrous paint has been introduced, this latter fabric metamorphosed with decoration in the Minoan style.

Thus there can be no doubt of the completely confirmatory bearing of the evidence from Zygouries on the threefold division of the Bronze Age in Southern Greece.

The great mass of ceramic material of Early Helladic date was also sufficiently differentiated both in character and place of finding to provide useful criteria for the further determination and definition of the subdivisions within the period. The triple division suggested by the stratification at Korakou was in the main clearly borne out, and I think it is now possible to speak with a fair degree of assurance of Early Helladic I, II, and III. A detailed discussion of this evidence has already been presented in the chapter on the pottery, and only a brief recapitulation will be given here.

Early Helladic I is marked chiefly by plain polished wares of varying grades of excellence, with and without incised decoration similar to the style prevalent in the Cyclades. The period also saw the introduction of an excellent lustrous glaze-paint, mostly red in color, often mottled red and black, which appears on vases side by side with polished ware. No decoration with painted patterns has yet been developed. The material of this stage came from the deepest deposits in the trenches below the south and west sides of the hill and from a mass of débris filling certain cuttings resembling *bothroi* in the west scarp. Cycladic influence on this pottery is strong.

Early Helladic II is distinguished by good glazed pottery, often red, but predominatingly black in color, and frequently mottled black and red. The glaze is generally of a firm, substantial quality, but not quite so brilliant as the lustrous red of the preceding stage; and the beginning of a process of degeneration is distinctly apparent. The old polished ware has practically vanished and a new type, finer and more delicate, perhaps imitating metal, makes its initial appearance. Patterned ware, on which dark patterns are painted on a light ground, is a further innovation. In all these wares the shapes have become much more distinctively mainland forms and less suggestive of Cycladic types. The material of this stage is represented by the deposits under the floors of the houses, especially in the central part of the hill.

Early Helladic III is the stage to which all the houses of the settlement as revealed by the excavations appear to belong. It seems to end with the total destruction of the Early Helladic town and perhaps at least a partial abandonment of the site. It is manifestly an age of decline and shows the pottery in an advanced state of degeneration. The good red and black glaze of the preceding stages is now almost completely lacking; instead, we find the vases usually coated with a thin brownish black wash, often almost without lustre. One of the most characteristic kinds of ware bears only a partial covering of this thin wash, generally on the upper half of the body, or in a band along the rim, and the final step in the

degeneration of glaze is represented by a class of similar vases altogether without paint. Patterned ware continues in various grades of quality, and before the end a new type appears, of which only the scantiest remnants were brought to light, showing patterns in thin white pigment on a dark ground. Curiously some of the best examples of the delicate polished and mottled ware which began in the preceding stage belong in this final phase, and the presence of such fine work among the great masses of debased ware contemporary with the settlement is something of a puzzle. As suggested above, the most likely explanation is that the best efforts of the handicraftsmen were now mainly reserved for other materials, and we probably have here a small group of vessels of special types and for special purposes, made in imitation of originals in precious metals.

With reference to the subdivisions within the Middle Helladic Period no new evidence was forthcoming at Zygouries, and the same statement holds good for the Late Helladic Period as well. The relative position within the long Third Late Helladic stage of the stock of vases from the Potter's Shop has already been sufficiently discussed; and we may now pass directly to a consideration of the fresh evidence bearing on the absolute chronology of the Early Helladic Period.

The material in question comprises the bronze dagger from House U, the seal impression from the same quarter, and the button seal from House Y; and the amulet from Tomb VII must also be included in the list. As already pointed out, the rather advanced type of the dagger, later than the specimens from Amorgos, is most nearly paralleled by a weapon from a tholos tomb at Platanos in Crete. The tomb was in use during Early Minoan III and Middle Minoan I, and this dagger, quite different from the characteristic broad and short type of Early Minoan times, belongs clearly to the later group of objects in the tomb. The seal impression offers a curvilinear variety of the labyrinth design which, though no exact counterpart appears to have been published, must clearly be associated with the similar patterns on the later ivory and stone seals from the tholos tombs in the same district of Crete. The closest analogy to our button seal of terracotta likewise comes from the same context (the Hagios Onouphrios deposit), and the division of the circular field into quarters is a common feature there. The foot-amulet, finally, is almost identical with examples from Tholos B at Koumasa (Xanthoudides, *The Vaulted Tombs of Mesara*, p. 31, Nos. 132, 134; Pl. III, 132; Pl. XXVI a, No. 132), and other specimens were found in the larger tholos at Hagia Triada (*Mem. Inst. Lomb.*, XXI, p. 251, Pl. XI, Fig. 27), in the tholos at Marathokephalon (*Αρχ. Δελτ.*, 4, 1918, p. 22, Fig. 8), and at Platanos (*Vaulted Tombs*, p. 123, Pl. LVIII, No. 1143).

All of these objects, which date from the latest phase of the Early Helladic occupation at Zygouries, are thus seen to correspond closely with relics found in the tholos ossuaries of the Mesara plain. The latter were employed for innumerable successive interments mainly during Early Minoan III and Middle Minoan I, and the analogies which they provide for the finds at Zygouries seem not to belong to the earliest group of objects found in the tombs. The evidence from Zygouries accordingly agrees perfectly with that discovered by the Swedish expedition at Asine, where seals and sealings of the same general character were recovered from the latest layers of the Early Helladic deposits. The chronological conclusions which Professor Persson so clearly drew (*Bulletin de la Société Royale des Lettres de*

Lund, 1923-1924, pp. 162-172) are thus further substantiated through these finds at Zygouries, and it may now be regarded as established beyond doubt that the Third Early Helladic Period on the mainland in part at least overlapped Middle Minoan I in Crete, and came to its end not far from 2000 B.C.¹ This approximate date is indeed the earliest fixed point yet established in the chronology of the mainland. The beginning of the Early Helladic age is still wrapped in uncertainties with no definitely datable Cretan (or other) connection to fix it. That the period was a very long one, occupying many centuries, cannot be gainsaid, but exactly how far back beyond the middle of the third millennium its origins may be sought must be left to the elucidation of future excavations.

In concluding this account of the excavations at Zygouries it may be worth while, so far as the evidence brought to light allows, to attempt a brief reconstruction in its general lines of the history of the settlement with which we have been dealing.

No traces of neolithic remains were found anywhere on or about the hill, and the earliest occupation must, therefore, date from the Bronze Age. Recent exploration in southern Greece has resulted in the discovery of pottery and other relics of the neolithic age at several neighboring places in eastern Peloponnesus. Corinthia, the valleys of Nemea and Phlius, and Argolis were certainly included in this sphere of early occupation; the shortest routes of communication between these points must have led directly through the Cleonaeon basin, and one might reasonably expect evidence of contemporary habitation to come to light here. Up to the present time none has been observed, and if the valley actually was occupied in neolithic times the settlement must have stood in another place and not on the hill of Zygouries. This shifting of the sites occupied by the settlements, and the totally divergent character of the neolithic remains from that of the Early Helladic, agree in indicating that we are dealing with the remains of two different peoples, doubtless of different race. The neolithic element is, so far as the evidence yet goes, the aboriginal population of the country, which we find in possession at the period when archaeological records begin. The Early Helladic element appears to be made up of invaders who, judging by their Cycladic and Minoan kinship, must have come in from the East, perhaps crossing the Aegean from southwestern Asia Minor. With their improved weapons of metal — copper and bronze — they seem to have been speedily able to master the native stock,

¹ It is apparently the failure to grasp the fact that Early Helladic III overlapped Middle Minoan I which has led to some recent misunderstanding of the chronological system here used for the mainland. The break in the development, on which this system of terminology is based, comes at the end of Early Helladic III, which, as we have seen above, must be fixed at least as late as the middle of Middle Minoan I, if not later. The Middle Helladic Period with its two subdivisions thus corresponds in the main to Middle Minoan II and III. The drawing up of a chronological scheme for a given area is not simply a free mathematical problem in which one is given complete liberty to work out a balanced and symmetrical arrangement; the case is much more complicated than that, and it is surely naïve in speaking of the subdivisions of the Early Helladic Period to say that they "should, but on Mr. Blegen's scheme do not, correspond with the three Early Minoan phases in Crete" (Childe, *The Dawn of European Civilization*, p. 75). Why should they correspond with the three Early Minoan phases in Crete, or with the subdivisions in any other area? The system is naturally modelled on Sir Arthur Evans' Minoan classification, which laid the foundations for all subsequent study in the field of Aegean chronology, but when applied to the mainland or to any other area outside of Crete, the subdivisions should and must correspond, not with a system worked out on the basis of internal evidence for Crete itself, nor with any fixed mathematical formula, but with the actual facts as revealed by excavations in the region in question. If they are to have any meaning in themselves they should and must correspond with the stratification. To transfer bodily the whole Minoan system of Crete to the mainland, as Forsdyke has done (*Catalogue of the Greek and Etruscan Vases in the British Museum*, Vol. I, Part I, p. xxii), is merely to impose an arbitrary arrangement. No scheme which fails to take account of the stratification is likely to be of permanent value.

and the completion of this conquest inaugurates a long era of quiet growth and development. During this period the remnants of the original inhabitants, who can hardly have been totally exterminated, were in all probability slowly and gradually assimilated.

The invaders were not a nomadic type of people, but lived a settled life in communities which they established in favorable positions controlling a region of arable land. A typical village of this kind stood on the hill of Zygouries, and the slow evolution and advance of its culture, as evidenced by the remains it has left, are no doubt also typical of the processes that were going on synchronously throughout the whole of this part of Greece. From the testimony of the pottery, this development seems to fall into three main stages, though the period is apparently a unity without a break.

Except for their pottery the first and second of these phases are still very imperfectly known. Small pieces of walls uncovered in the deeper levels of the trenches in the west central part of the hill indicate that in the second phase, at least, substantial houses were erected resting on stone foundations, and rectangular construction was customary. But no complete house was cleared, and nothing can be said of the plans. For Early Helladic III, the third phase of the period, however, much more evidence is available, enabling us to recover a fairly comprehensive picture of the life of the day.

The village, which was of some size and consisted of many houses built close together, was laid out in a fairly orderly manner with streets and lanes. The houses, though simple and unpretentious, were solidly built, with heavy stone foundations and superstructure of crude brick; they usually consisted of two rooms of unequal size, connected by doors which swung in pivots; and in one case at least there was a fixed central hearth. The floors were made of hard-packed earth; the roof was flat and built of logs plastered over with clay and reeds. Household supplies were kept in large storage jars sometimes ranged in a row along the wall of a room. Only one house was of especially large dimensions; perhaps this was the home of the chieftain or the headman of the village.

The dead were buried outside the settlement, presumably at first in separate graves; later the bones seem to have been gathered up for secondary burial in small cave-ossuaries. With the dead were deposited pottery, implements, and articles of personal adornment such as gold pendants, silver diadems, beads, and in one case an amulet.

The village was evidently a prosperous agricultural community. It seems to have imported goods on a fairly considerable scale from comparatively distant quarters, and perhaps it had commodities of its own to give in exchange. Among these latter may have been agricultural produce, livestock — sheep and goats and swine were certainly raised and probably larger cattle — perhaps also potter's clay. Imports included above all obsidian from Melos, lava or volcanic stone for millstones and grinders, marble vessels and figurines from the Cyclades, gold, silver, and bronze; and trade connections with Crete are apparent. Such open commercial intercourse between a small town in an upland valley on the mainland and regions across the sea implies an age of tranquillity and security from hostile incursions; it also implies power and organization to patrol the highways of traffic, but whence came the power and who controlled it are questions which cannot yet be answered. At all events it hardly seems likely that any considerable concentration of royal domain is to be sought at this early date on the mainland itself; the many Early Helladic

settlements which have hitherto been found seem all to have been modest little towns, not much, if at all, different from the one we have been describing.

The flourishing village at Zygouries, which may be taken to represent the final stage reached after many centuries in the slow progress of Early Helladic civilization, appears to have been abruptly destroyed by fire. The extensive deposits of pottery and other articles of furniture lying on the floors of the houses suggest that it was a sudden and unexpected catastrophe, and it may not be mere phantasy to recognize a more vivid confirmation of this in the cooking pot from the House of the Pithoi, which still contained a large beef bone, the remains of the last meal prepared in the house.

The occasion of this destruction is not difficult to surmise. It is surely the same as that which caused the abandonment of so many settlements in Corinthia and elsewhere¹ and which left its traces in the layer of ashes and charred remains which covered the final Early Helladic town at Korakou; the same as that which introduced a fresh infusion of culture into these regions with a new type of house, a new type of burial, and new types of pottery. It can have been nothing other than a hostile invasion and conquest, and without doubt marks the arrival of a fresh racial element quite different from that which it destroyed. Rude and vigorous it certainly was, for it seems to have rolled like an inundation out of central Greece over Attica, eastern Peloponnesus and Laconia, reaching at least as far as the Helos Plain. One of its chief distinguishing marks is the wheel-made gray Minyan pottery it brought with it, and the appearance of this ware in quantities at Melos shows that the movement was felt far down among the Cyclades.

This invasion probably worked itself out in the course of the twentieth century B.C., after which succeeded another interval of quiet. But the town of Zygouries, which had fallen a victim to the inroad, was evidently not reoccupied and rebuilt on its previous scale; indeed it may have been partially or completely abandoned for some time. Eventually, however, it was again occupied — the situation is a very eligible one — though probably only by a small hamlet. To this latter must be attributed the Middle Helladic pottery brought to light in the excavations and the cist graves found on the hill, for in this period burial within the settlement was customary. The houses must have been few and perhaps widely separated, as only scanty remains of walls were found.

Like all other Middle Helladic settlements in southern Greece this too came ultimately under the dominating spirit of Minoan influence, and it continued to exist through Late Helladic I and II as a Mycenaean station near the intersection of two important roads joining the Isthmus with the Argolid. No recognizable architectural remains of these periods were found; but in Late Helladic III there came a revival. Many houses were constructed on the low ground to the east and west of the hill, but the hill itself seems henceforth to have been reserved for a single large mansion, perhaps the residence of the local governor or noble, subject to the king at Mycenae. His house was built in a fashion reminiscent of the Cyclopean walls at the capital and decorated with frescoes in the traditional Mycenaean style. In his cellars he, or his successors, stored a vast quantity of pottery, perhaps for sale

¹ Early Helladic sites which were never again reoccupied in subsequent periods are not at all rare throughout the southern parts of Greece. As examples may be named Hagios Kosmas below Phaleron and the hill southeast of the modern village of Spata in Attica; Makrovouni just to the west of the Aspis at Argos; and Palaipyrgos not far from Vaphio in Laconia.

or export. The abundant clay beds about Zygouries may have led to the establishment of the potter's industry as a large enterprise.

This state of affairs lasted for some time — the chamber tombs in the Ambelakia cemetery might account for two or three generations; then no doubt a further decline followed, and it was only as an insignificant hamlet again that Zygouries continued to subsist down to the shadowy end of the Mycenaean Age.

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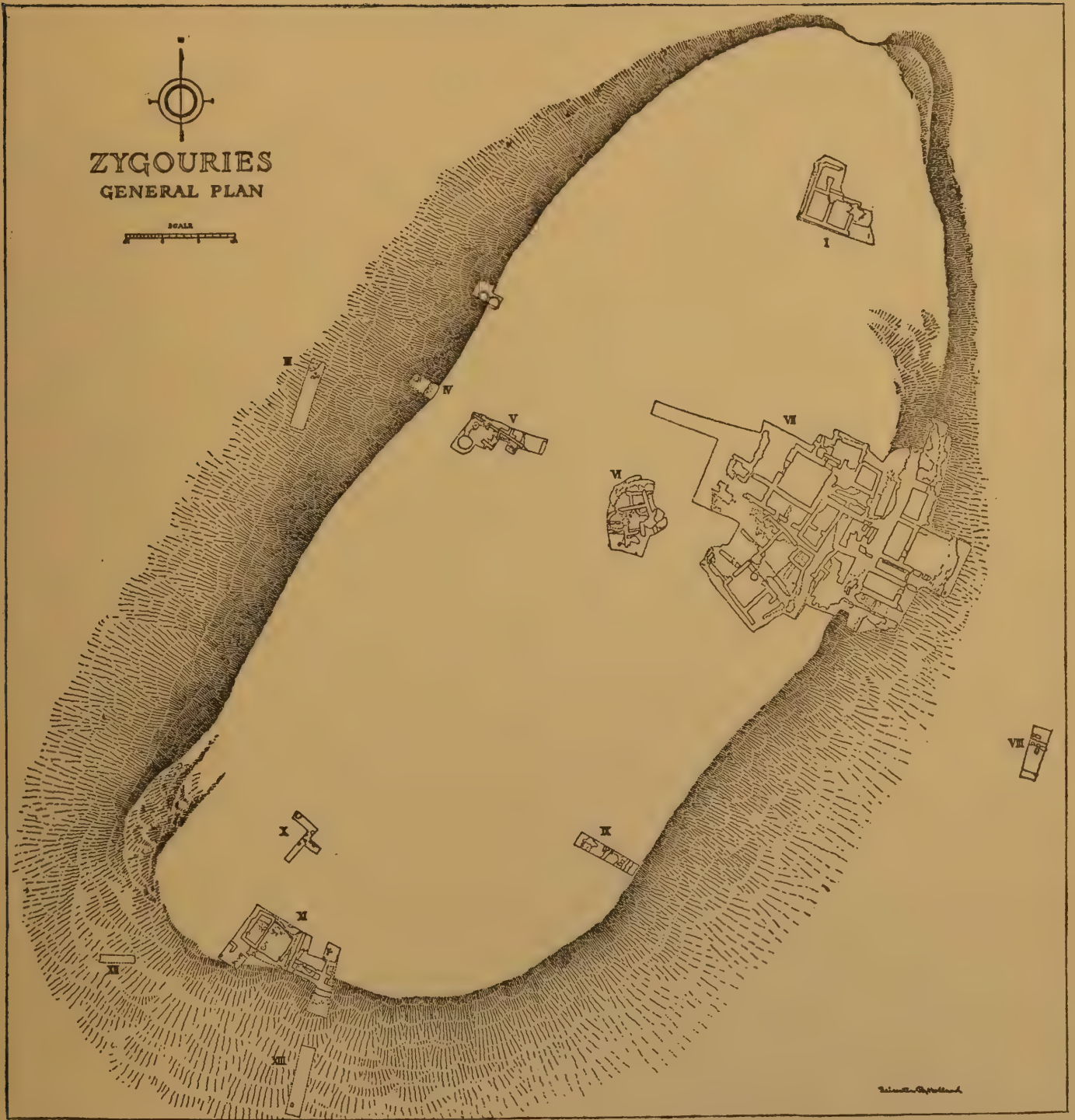
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PLATES



GENERAL PLAN OF THE EXCAVATIONS



DETAILED PLAN OF WALLS, CENTRAL AREA OF THE SITE



FRAGMENTS OF PAINTED PLASTER FROM THE POTTER'S SHOP



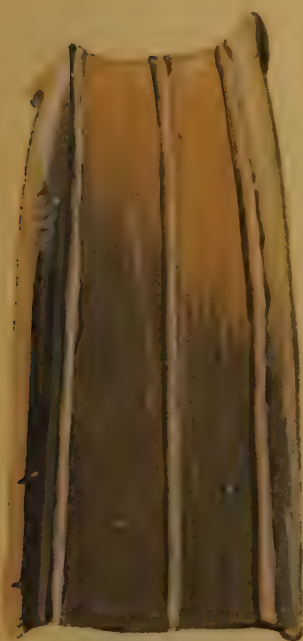
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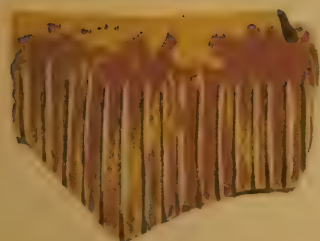
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EARLY HELLADIC WARE, CLASS A II, SLIPPED AND POLISHED



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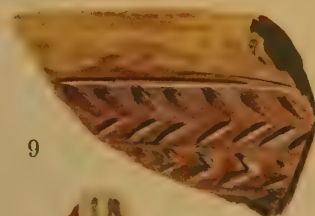
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EARLY HELLADIC WARE, CLASS A II, SLIPPED AND POLISHED, WITH INCISED DECORATION

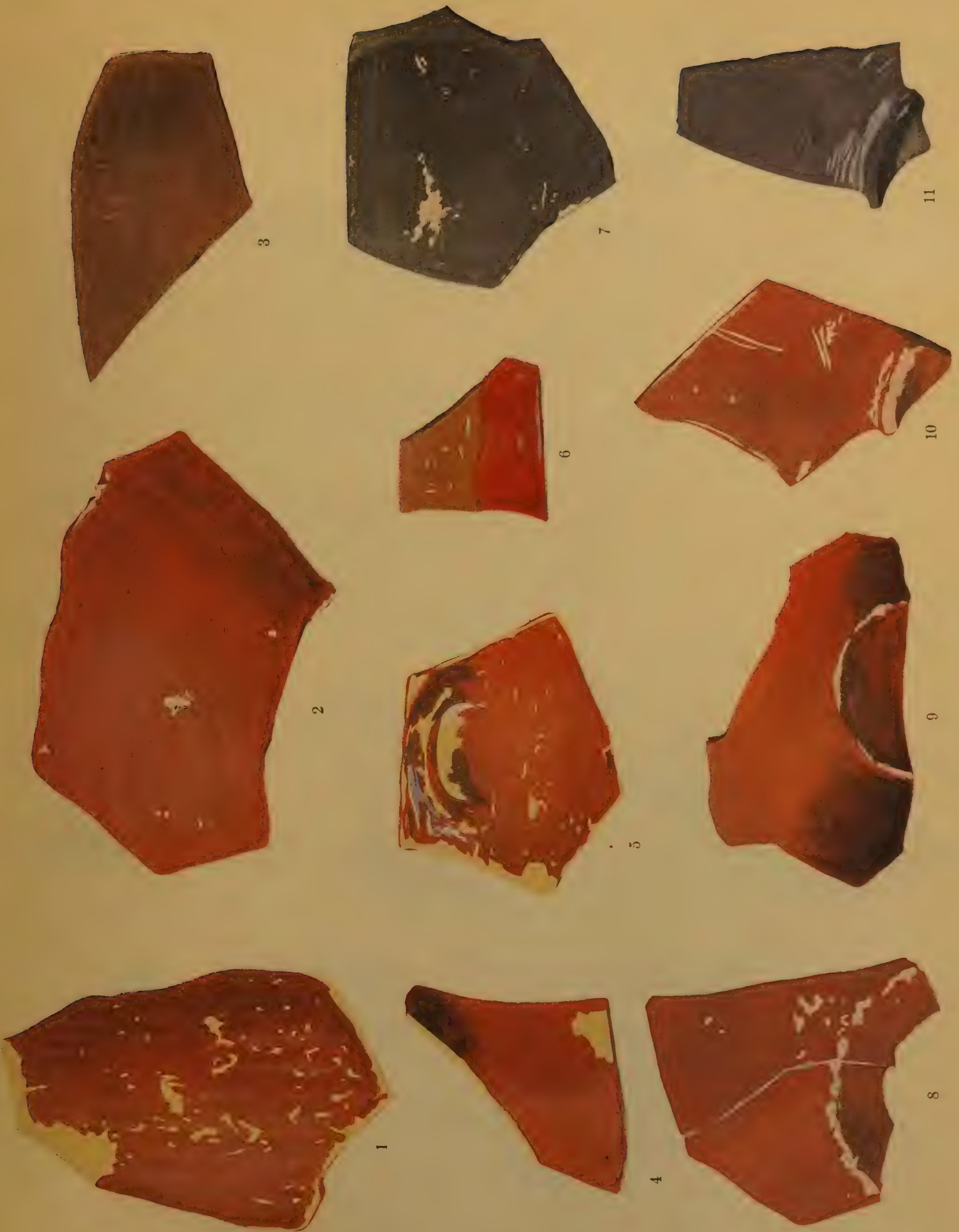


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EARLY HELLADIC WARE, CLASS A II, No. 564 (above); CLASS B II, No. 577 (below)



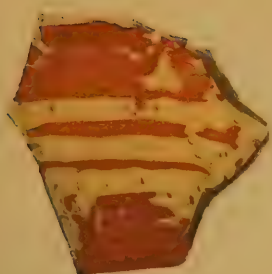
EARLY HELLADIC WARE, CLASS B II, EARLIEST TYPE OF GLAZE TECHNIQUE



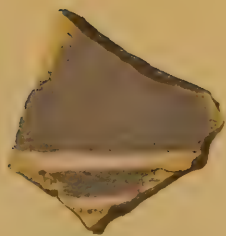
EARLY HELLADIC WARE, CLASS A II, SAUCEBOAT (NO. 317) AND FRAGMENTS OF YELLOW MOTTLED WARE



EARLY HELLADIC WARE, CLASS B II: 1, No. 251; 2, No. 260; 3, No. 238



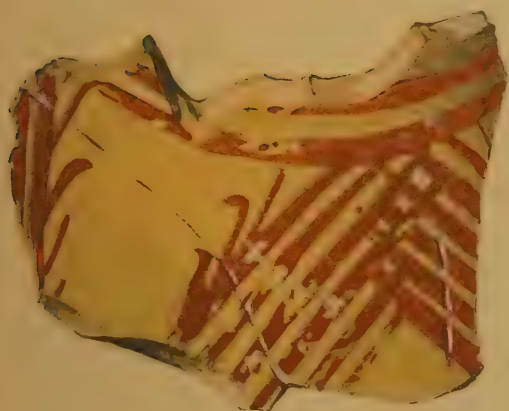
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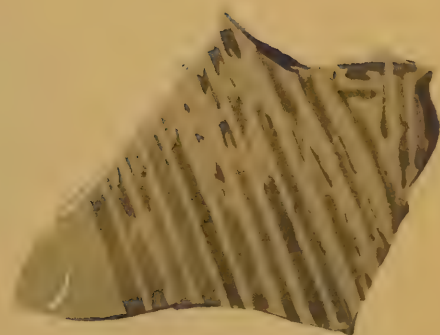
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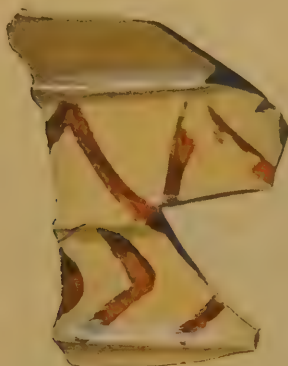
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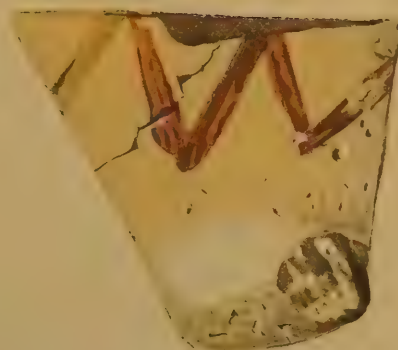
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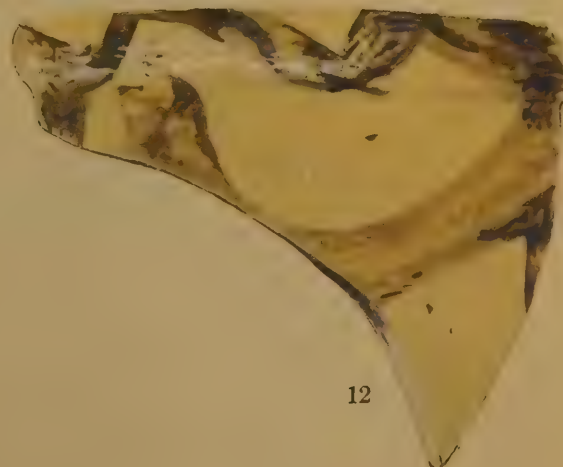
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EARLY HELLADIC PATTERNED WARE, No. 114, CLASS CI (a); No. 205, CLASS CI (b)



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EARLY HELLADIC PATTERNED WARE, TWO TANKARDS: 1 (No. 113), CLASS CI (b); 2, CLASS CI (a)



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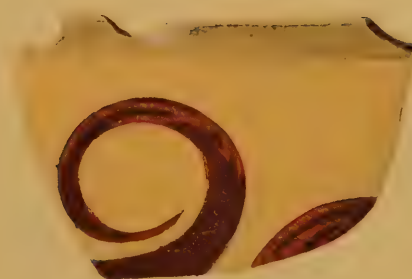
THREE POTS FROM TOMB XXII, MIDDLE HELLADIC PERIOD: 1, No. 305; 2, No. 306; 3, No. 304



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GOBLET, No. 276, AND FRAGMENTS, EPHYRAEAN WARE



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TWO CYLIXES FROM THE POTTER'S SHOP: 1, No. 70; 2, No. 45



CYLIX, No. 48, FROM THE POTTER'S SHOP



CYLIX, No. 63, FROM THE POTTER'S SHOP



1



2

1. JAR WITH THREE HANDLES, No. 50, FROM THE POTTER'S SHOP
2. JUG, No. 350, FROM TOMB XXXIII



MISCELLANEOUS OBJECTS, CHIEFLY FROM TOMBS, EARLY HELLADIC PERIOD



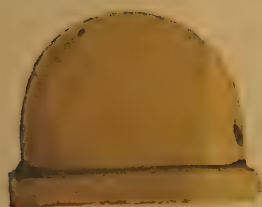
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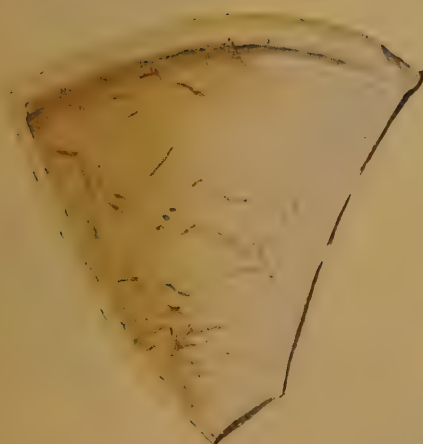
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STONE IMPLEMENTS, EARLY HELLADIC PERIOD

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